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THE SOUTHERN PLANTER AND FARMER

DEVOTED TO

Agriculture, Horticulture, and the Mining, Mechanic and
Household Arts.

Agriculture is the nursing mother of the Arts.—XENOPHON.
Tillage and Pasturage are the two breasts of the State.—SULLY.

CH: B. WILLIAMS, - - - EDITOR AND PROPRIETOR.
WM. L. HILL, - - - GENERAL AGENT.

New Series. RICHMOND, VA., APRIL, 1868. Vol. II.—No. 4.

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Vol. II---No. 4.

REPORT OF DEPARTMENT OF AGRICULTURE.

NO. III.

Dr. Antisell, of the Department, furnishes a valuable and interesting article on the "Cultivation of the Cinchona in the United States." His object is "to call the attention of agriculturists and others to the necessity for and advantage of cultivation in the United States of that genus of trees which yields Peruvian bark and quinine; and, in so doing, to give an outline of the natural history of that family, to detail the steps which have been taken by other nations in the effort to obtain within their national limits a sufficient supply of that drug, so necessary to all inhabitants of southern, temperate, and inter-tropical latitudes, and to demonstrate the imperative necessity on the part of the government of the United States of decided, active and prompt measures to establish Cinchona plantations within the domain of this great republic."

Dr. A. fills this outline ably in the twenty pages devoted to this subject. He shows that this genus is diminishing rapidly in its native habitat in South America, and will become extinct unless it be revived elsewhere. The British people with their characteristic philanthropy and energy are engaged actively in this work in India and other colonies. "To the English are due the first, and, indeed, the only successful attempts at acclimating these valuable trees. Efforts had been made by other nations previously, as by the French and the Dutch. De la Condamine, a member of the French expedition of 1735, designed chiefly to obtain astronomical results for geodesy, not only was the first who described the Cin-

chona living in its native forests, but was also the first who attempted to transport some young plants to Paris. In this he failed, as the box with the live plants was unfortunately washed overboard, after he had faithfully watched over them for eight months. The French government, under the reign of Louis Philippe, sent Dr. Waddell, a gentleman of extensive scientific knowledge and well qualified for the mission, to South America, with the special object of obtaining full information concerning the Cinchona trees." Seeds were carried by him to Paris and sown in the *Jardin des Plantes*, from which the Dutch made a plantation in Java. This was not successful for various causes, stated by Dr. A. The English began their efforts about ten years ago to raise the cinchona in India, and they have several large plantations in successful cultivation. They have three plantations in the East, one in Jamaica, and others at the Mauritius, Queensland, Natal, and Trinidad. The Dutch have one in Java.

Mr. Buckalew, of the United States Senate, has made efforts to introduce the plant into this country; and it was hoped there was a suitable locality for it in Texas. But Dr. A., from personal knowledge acquired there and in California, thinks that the only district suited for it, within our limits, is in the latter State between the counties of San Luis Obispo and San Diego. The requisites are high elevation, without frost, and with abundant rain at appropriate seasons. It is to be feared that these combinations can hardly be found even in that wonderful land.

"Scarcely seven years have passed since the first plants were introduced into India, and there are now nearly a million and three quarters of trees scattered over the hill ranges of Ceylon and India, from Hakgalle to the Himalayas of Bengal, flourishing everywhere, except in those secluded hollows where the night frosts kill them."

In six years, from 1859 to '65, 1,639,402 pounds, in value \$2,-161,250, have been imported into this country, of the varieties of bark, sulphate of quinine, &c. New Granada has shipped to us half the bark. Nearly all the quinine is imported from England.

There is an elaborate article of twenty-six pages on "Ship-Timber in the United States." Like the Cinchona, "our white-oak and yellow pine forests are ravaged by everybody for indiscriminate purposes. From navy-yards to cooper-shops, from railroads to street alleys, and from bridge-building to shingle-making, there is no quarter given to the oak and no peace to the pine. When we reflect that more than *sixty trades* and nearly *half a million artisans* flourish and prosper by consuming wood in manufactures in the United States, and that by far the greater proportion of woods

used are the very kinds preferred in ship-building, it will become manifest that there is real cause for serious consideration of the subject of future supplies. Ship-timber now costs nearly or quite double what it did ten or twenty years ago; and what is more, certain influences are at work narrowing the circle of woods eligible for construction, and thus increasing the difficulty of building a vessel for a moderate price. It will yet become a question of importance among ship-owners, whether there are not other timber growths than oak and pine to be found in the forests of the United States, from which good and durable vessels may be built for reasonable prices."

This ought to admonish the land-holders of Virginia and of the South to be careful of their forests, for they are destined to be immensely valuable. Let us no longer waste, but nourish them. The railroads will convey them from the mountain to the sea.

Apart from a little May-flower rhetoric, there is an interesting glimpse, in thirty pages, of the "History of the Agriculture of the United States," by B. Perley Poore, of Mass. As "the English Puritans, who settled in New England, were men who regarded civil and religious liberty as the primary object of rational beings," Mr. P., after giving us this extra-agricultural information, ought to have told us how soon they degenerated to be persecutors—how they became the propagandists of slavery—how they taught doctrines of secession, and how they persecute vanquished victims. A retrospect like that would have made him more chary of taunts about rebellion. If politicians may not, agricultural writers should cease from the old device of crying "stop thief!"

Mr. P.'s retrospect is, nevertheless, interesting, and he culls from the *National Intelligencer* and *American Farmer* pleasant, if not useful, material.

Mr. Tinden furnishes ten interesting pages, entitled "High Farming," being an account of the wonderful energy, in farming, of the Hollanders, who have reclaimed great lakes and cultivate lands below the level of the sea, whose waves beat in vain upon their high and massive embankments. Here, we have no difficulties like these to overcome, but we can imitate their example of successful industry. "Let the farmer, instead of doubling the extent of his farm, double the increase of his crops. Let him provide more and better shelter for his stock, and thus keep them in better condition and at a less expense. Let him make a better use of oil-cake, both of cotton seed and linseed, for the purpose of fattening his stock and for increasing the value of manure. Let him study

to improve his farm buildings, making his house more convenient for the use of his family, and his grounds around it more tasteful and ornamental.

"It is with a view," says Mr. Tinden, "to encourage the farmers of the United States to undertake the improvement of their farms, and aim at a higher cultivation of them; to regard difficulties, however great, as not insurmountable; to make a free outlay of capital in view of a sure return in increased production, that the article has been prepared." It is in this last respect that our farmers in past times have been defective; and it is this which makes retired merchants or men of business the most successful farmers, because they appreciate the expenditure of capital from which profits are to enure.

A most useful, practical article of nearly thirty pages follows, upon "Country Roads." It would be valuable to those sections where materials abound for the construction of good roads. We have to admit that our system in Virginia is very defective. As our population fills up, necessity will compel the making of better. We need skilful superintendents, with a proper manual showing them the mode of performing their work. There should be a classification of the roads, the first and principal labor being applied to those of most importance. Let these be well graded and gravelled, after complete draining, without which, no road, even if made with stone, will remain in repair. There are, now, too many roads and too little labor. Let the main arteries be first regarded—the others will be arranged in due time. It would take too much space to do more than make this brief reference to the excellent article of the Messrs. French & Shedd, of Boston.

Rev. Mr. Howard, of Georgia, gives an interesting account of the "Empire State of the South," and of her vast resources. It is in size equal to England and Wales, and would absorb near half a dozen European kingdoms. Cotton has been its great crop; but Georgia is well adapted to the cereals, to fruit, and especially to sheep. "With the subject of wool-growing the writer is familiar from practice and observation at home and abroad. It is his conviction that, considering the climate, price of land, markets, and facilities for summer and winter grazing, Middle and Lower Georgia afford a prospect of more rapid fortune in wool-growing than any other region within his knowledge. Cotton has heretofore blinded the eyes of planters to the value of their land for this purpose. There is no reason why the wool crop of Georgia should not be larger than its cotton crop ever was."

About cotton, he says: "During the past year there have been

numerous experiments of Northern men in different parts of the South in cotton growing, and about as many failures. They forgot the old Latin adage, "The cobbler should stick to his last." They were, for the most part, sutlers, quarter-masters, or federal army men of one kind and another, who knew nothing of the negro, nothing of Southern soil, climate and products, and yet sought no advice from those who did. Of course they failed."

The gold mines of Georgia have been rich; and the writer thinks there would be a great rush of adventurers there if they were on the other side of the Rocky mountains. "The white marble quarries of Cherokee county are of great extent, a portion of them affording statuary marble. The slate quarries of Polk county are now attracting much attention. The slate is considered equal to the Welsh, and is now being shipped to New York. The quarry is of enormous extent. Hydraulic cement, nearly white in color, and of excellent quality, is made near Kingston, Bartow county."

To do full justice to Georgia would leave little space to "California—Her Agricultural Resources," to which Mr. Dunn devotes thirty pages, and must now be compressed in two. The accounts of this wonderful State have seemed fabulous. Her mineral wealth was regarded as her great attraction when crowds sought wealth there. Her wonderful agricultural resources are now being developed, and are as startling as her mineral. Strange is it that a Spanish race occupied this Pacific coast for centuries and developed nothing except cattle, hides and tallow. In twenty years, Anglo-Saxon energy has wrought wonders almost exceeding belief. In this time, its population has grown to half a million in California, San Francisco alone having 130,000 souls.

Her agricultural resources must be stated briefly. "In the earlier years of grain growing, the average product of wheat was between sixty and seventy bushels to the acre, in favorable seasons. Instances were common where large fields of from sixty to one hundred acres averaged ninety to one hundred bushels, and selected acres as high as one hundred and twenty bushels. At the present time the average yield of wheat, *properly sowed*, in ploughed land, is about forty bushels per acre." The next year volunteer wheat, with no culture, and after being grazed, yields about twenty-five bushels to the acre. These are the highest estimates. In a letter copied by the *Southern Churchman* from the *Alta California*, there is an interesting letter from Dr. Ashe, a Southern farmer, who has had sixteen years experience in the San Joaquin Valley, confirms Mr. Dunn. He says his own crop has averaged to that time nine to

twenty bushels per acre, his second year's crop equal to the first, with no expense of sowing.

"The average yield of barley, where sown on new land or land that has not been continuously cropped for a series of years, is about fifty-five to sixty bushels per acre in good seasons. Instances are very common, however, where the yield has averaged as high as from eighty to one hundred bushels; and in 1854 a field of one hundred acres, in Pajaro Valley, Santa Cruz county, averaged one hundred and thirty-three and two-fifths bushels of clean, plump grain for the whole tract."

Obliged to pass over other products, we come to the fruits. Besides maturing early, the fruit is extraordinary in size and great in quantity. Specimens exhibited in San Francisco, have weighed, of apples, (*Gloria Mundi*), 32 and 34 ounces; pears, 84 ounces; plums, 7 ounces; apricots, (*Moorpark*), 16 ounces; peaches from one-third to one-half size larger than the same varieties cultivated in the Atlantic States. All of these fruits are free from the ravages of insect life. "California-grown oranges range from 6 to 12 ounces each. Lemons of three varieties—*Malaga*, *Sicily*, and native, of which the native lemon, although of large size, is the poorest and little used, range in weight from 8 to 16 ounces each." Figs, prunes, currants, raisins, olives, almonds, nuts, and berries abound.

All the vegetables thrive well, and many are grown and gathered at every season, equal, and, in some cases, superior to those of the Atlantic States. Of the largest varieties grown near San Francisco, an Irish potato weighed 7 pounds; sweet potato, 26; beet, 135; cabbage, 56; turnip, white, 26; turnip, yellow, 14; carrot, 31; onion, $2\frac{1}{2}$ to 4; tomato, $2\frac{1}{2}$; watermelon, 34; pumpkin, 350; crooked neck squash, from 96 to 110 pounds. "Of the prolificness of the potato, it is a matter of indisputable record, that a Mr. Hill, of Pajaro Valley, in 1855, raised from the cuttings of a single large potato 853 pounds merchantable weight, which were exhibited in San Francisco."

Textile fabrics, wool, silk, tobacco, and other valuable products must be passed over to come to the wines and brandies of California, which the writer thinks, "from present appearances, will, by the close of the present century, out-rank in importance all the other agricultural products combined."

"The soil and climate have proved so well suited to wine growing, that at the present time the number of vines in California probably exceeds that of all the rest of the States combined." The number

to 1866, is estimated at about thirty millions, of which eight to nine millions are bearing vines, the fruit of which is mostly made into wine and brandy. "In the Sierra Nevada, below an elevation of 2,500 feet, there is a belt of land almost valueless for ordinary agricultural purposes, that will average twenty-five miles wide, and between three hundred and four hundred miles long. The greater portion of this land will, in time, be planted in vineyards, as the wine produced is of a very superior quality." Los Angeles county produced in 1866 between 1,100,000 and 1,200,000 gallons of wine. In Sonoma Valley, there is a vineyard of 3,200 acres, of which 400 are in bearing. "During 1866 there was made one million gallons of wine in the Coast Range district, and, with a good crop of grapes the coming year will witness an increase of full fifty per cent. in the product."

These accounts look marvellous; but coming as they do with the impress of official sanction, our incredulity sinks to wonder and admiration.

But, withal, California has its wants and its drawbacks, which Mr. Dunn states frankly. "In addition to the great superiority of climate, the vegetation in California is almost entirely free from the ravages of insect life, often so disastrous in the other States. With the exception of occasional irruptions of what are termed army worm and grasshoppers, there is no insect life to injure vegetation. The ravages of those named are seldom of any great extent, the sections of country where they prevail at any time being limited. One cause for the comparative freedom from insects is the dryness of the summer season, and *the immense quantity of small insect-feeding birds which are to be found throughout all the country.*" "In many parts of the State, however, considerable damage is done to the grain crops by ground squirrels and gophers, which exist in great numbers." * * "Another drawback is the high cost of transportation of produce to market, and the limited character of the home consumption compared with the crops raised." The italics of the above extract are designed to call the attention of *our farmers* to the merciless destruction of insect feeding birds, which ought to be nurtured, not destroyed, though they consume a little grain and some fruit.

"California needs prudent, economical, and enterprising immigration. Persons must not come with the expectation that Fortune will smile on them without their personal efforts to succeed. To the honest, energetic and industrious, there are opportunities to acquire wealth, either by farming, mining, or mechanics, that cannot

be found in the other States." * * * "To the idle and shiftless, it is the worst place to which they can come."

The Report ends with thirty-five pages of the meteorology of 1866, embracing nearly all the States and Territories. This is valuable for reference, for the running of isothermal lines, and for the emigrant who regards temperature as an element of the country which he shall select for his residence.

It is much to be desired that these interesting "Agricultural Reports" were disseminated widely among the farmers. If a copy or two were kept for consultation in the clerk's office of every county, great benefit would result, and it is suggested that our agricultural papers urge this upon the Department of Agriculture.

E. T. T.

March 10th, 1868.

Small Farms, White Labor, and the Tenant System.

Mr. Editor,—Some writers are advocating the "large farm" system as preferable to the "small farm." The mode of argument adopted is not so much the merits of the former, as the demerits of the "intensive" system. Ordinarily, no one could object to this sort of reasoning, as it is negative and can prove nothing. Moreover, the suggestion is natural, that *perhaps* the "intensive" and "small farm" systems are two entirely different things; and in truth they are. But many of our plain people, who have not time to dip into European lore, are misled when they see written so many objections, so strong, too, to the "intensive" system, and readily conclude that "*small* farms wo'n't do." If, however, they understand that this "intensive" system is nothing more than vegetable and fruit raising as seen in the miniature farms in our suburban districts, they are at once ready to exclaim, "This is not farming, it is 'trucking,'" and its disadvantages are not applicable to farming proper.

The large farm, or "extensive," system, has been tried by our people for two years past. Some—the writer included—worked with hired labor, mostly for the year; others tried the "partnership" system—remunerating the labor with an interest in the crops. The result was that, few, if any, realized a profit; other farmers worked on the small scale, paid out but little for labor, made about as good a support as the large farmers made, which was *all they* made, while in some instances profits accrued to the small farmer.

Let us now consider some of the objections to "large farms:"

1st. It is too expensive, and correspondingly wasteful, and peculiarly the latter, with black labor.

2nd. It is hazardous, and particularly so in our present condition, poor as we are, and without credit. To illustrate—Suppose A wishes to work a farm of 1000 acres the year 1868:

Expenses—To hire of ten hands \$100 each	\$1,000
food for same (house and fuel not estimated)...	500
ten tons of guano.....	900
seed wheat and grass.....	500
reaper and drill, \$125 each	250
farming implements, (ordinary).....	100
blacksmith's account and repairs.....	100
	<hr/>
	\$3,350

Assuming A to have on hand, wagons, carts, &c., and sufficient corn and forage for teams, necessary teams and stock, still his additional outlay will be about \$3,000. How many of us can command that sum? And will it not take all the ready cash of those who can? In the event of a failure of the crop, what will be A's condition at the end of the year? His cash is exhausted and his income has failed. He is forced to contract his operations, if not to sell his property at a sacrifice.

Again, this "extensive," or large farm, system, is against the practice and experience of nearly all of Europe, with the cheapest and best white labor in the world. It is against that of the sharp, calculating Yankee, with white labor. It is true that in the Northwest there are very large farms, and perhaps they are successfully operated. But by whom? Men of capital and credit. We have neither, and therefore one failure brings ruin upon us, as it has done upon the cotton planters farther South. These large farms are generally on the prairies, and are as level as the bosom of the broad ocean. There the gang-plough and even the steam-plough can be used; the six-horse reapers, and other machinery of the expanded and extended class, are worked with intelligent white labor. Our valleys may be without a "stump or a stone;" but who among us will be guilty of the folly of breaking land for corn with the gang-plough, driven either with steam or horse power, managed by negroes? or of harvesting wheat with the six-horse reaper? Yet no principle of economy is plainer than this, that in proportion to the use of the extended or expanded labor-saving ma-

chinery, in the same proportion are the man-labor and farm expenses lessened. Hence, this fact does not support the "large farm" theory here.

Nor does the "small farm" leave the reaper and drill to rust. A farm of, say, 150 acres will require two hands to cultivate it with aid in busy seasons. These lands must, in addition, use both of the implements. Assuming the small farm system to be the true one for us to adopt, how is it to be started, labor being so scarce? The first point towards this end is attained so soon as our farmers arrive at the conclusion that their large farms must be sub-divided; and until that first step is taken there can be no resultant. The answer however is, by emigration from abroad, and from the North. From the North first as tenants, (farmers, as they are there called,) and then as purchasers. Not only will emigration flow into Eastern Virginia "in this generation" sufficient to justify the cultivation of small farms, but in a few years. We have, as yet, done nothing to invite it; we have done much to discourage it. Strong influences at home are brought to bear upon their minds against us, our lands, &c. We have made no effort to correct or check them. We have been content to advertise a single farm occasionally, or let land-brokers do so for us, or write to Mr. Greeley that, "our wolves will not devour his lambs." But this is far short of the demand. A large party at the North, for political purposes, at the sacrifice of truth, have employed, and are now employing, every conceivable means to prevent immigration here. And ridiculous as it may seem to us, very many of the Northern people are kept away by *fear* for personal safety. In addition, they reason, and rightly, too, that we will not mingle in social intercourse with them, and society they must have. We cannot, therefore, expect people to come among us while actually afraid to do so, and at the same time be all alone without society. These are the first real difficulties, and they are easily removed. Suppose the large land-owners in each county will organize and select one of their number to advertise and conduct the correspondence. Make a short description of each farm for sale or lease, classify the farms so as to be advertised as adjacent or in same vicinity. The Northern farmers will at once see a sufficiency of land in a body, or in close proximity, upon which a number of them can locate, and thereby insure personal safety and society. Then send an agent to the points from which you desire to procure immigrants, and solicit them to send their agent to you. The contracting parties will thus be brought face to face, and the subject of contract seen and examined. Much that the land-broker

is now making can be saved, and greatly more done with our lands than they are doing, or can do.

The States to which this section of Virginia should look for both tenants and purchasers, are Delaware and New Jersey—particularly the former. There, lands are worth from \$100 to \$150 per acre, and originally not so productive as ours. The crops are the same raised there as here, except tobacco, and a resemblance in soil so strong as to approach identity. I will not stop to speak of our advantages in climate. The usual annual rent in Delaware is from \$5 to \$7 per acre, or one-half of the grain and potatoes, stock, &c., raised delivered in market. The tenant (or farmer, as there called,) furnishes everything requisite on the farm, and does all repairs to enclosures, &c. The land-owner furnishes the land, buildings, and constructs the original enclosures. Can we, then, hold out inducements to these farmers greater than they have at home? Can we lease them farms for five or ten years for one-third of the product, and even for one-fourth, and do better than we are now doing? Let us look to our farm accounts for two years past and see the amount placed to the credit side thereof. Let us look again to the lands—our capital—and see its condition, if improving, if depreciating, and perhaps we can better answer the question.

Again, the system now is for the land-owner to furnish to the lazy and wasteful negro house and garden, fuel, farm implements, teams and feed for same, and land to cultivate. In consideration of all which, he receives one-half of the crops raised! What are the results of this system? Teams are abused, if not killed; tools and implements lost and broken; timber wasted for fuel; obliteration of fences; save where briars and bushes mark its former line. In short, a general sweeping injury to the whole farm and everything on it, with the grand resultant of about as much corn at the end of the year as the teams have consumed.

That this system is rapidly bringing ruin and bankruptcy is obvious. The fact that those who have tried it, have made but a poor support and no profit, while their lands—their capital—have depreciated, lifts the veil of doubt from the eyes of all. Let me illustrate again: A. has a landed capital of say \$10,000. He has operated under this system two years, and made only a support. His capital has depreciated \$500 annually. He commences the year 1868 with a capital reduced to \$9,000. If it took the proceeds of \$10,000 to support him, he must this year draw \$60 from the principal. How long, then, will it take A. to become a bankrupt? This is a practical sum; and by its answer we can estimate

the inducements capable of being offered the *foreign* tenant, no matter when he comes. It is not proposed to go into a calculation of our wastefulness as farmers. Suffice it to say, that raised in times so different from the present, we have yet to take our first lessons in farm economy—nor can we learn it from each other; but only from those upon whom the pressure of necessity has stamped it upon their characters, and developed it in their every action. Of the economy of *time*, labor, fuel, &c., we really know nothing. The assertion that every laborer (negro) employed on my farm the present year, with his family, will cost me in fuel alone \$100, will startle many. Yet it is *true*. And another fact is true that a laborer at \$100 per year with *rations*, house, garden and fuel for himself and family, costs more than the white laborer at the North at \$15 per month. And why? because there the *laborer* is employed only a few months, and paid only his hire and board. Five Northern laborers, under their economical arrangements, will consume about as much fuel as one negro does. Nor must we discard this plan of leasing, for, to many, it is preferable, even to selling. The Northern people will be slow to purchase, except at a gouging low price, until they have first settled among us as tenants, seen the people and tried the lands. Their desire to lease is coupled with, and augmented by, the expectation of purchasing. It is plain that the farmers, alike with the land-brokers of this section of Virginia, have made a mistake in supposing the Pennsylvania and New York farmers will purchase here so long as the Valley is unsettled. They want grass lands, whereas the Delaware and New Jersey farmers want grain lands. It is to these States, then, and particularly the former, we should turn our attention.

Nor should this plan be supplanted by that of white labor. The tenant system brings necessarily the white labor, that of the tenant's family, comprising his sons and daughters, and often sons-in-law. But will white labor relieve us of our difficulties? As a general system, except as tenants, I fear not. In the first place the monthly hire the year round will be too expensive, and they have no villages and towns near by to seek employment in during the winter. Here he must be hired the year round, or you lose him altogether. Again, he must have society. Here, if a single man, you must take him in your house, and seat him at your table. If he is satisfied with less, he will soon become worthless. If he has a family, then the ordinary *out-buildings* are not satisfactory; and besides, he must have *milk*, coffee, sugar, &c., as we have. The white laborer will bring only labor—the tenant system will bring

both labor and capital. The introduction of the one will facilitate that of the other. They are not antagonistic, but auxiliary.

Lest these too hastily written thoughts upon a subject of common interest should be misunderstood, the leading ideas designed to be elaborated will be given in their order of importance:

First. The lands of Eastern Virginia must be cultivated by *white labor* before any material improvement in our pecuniary condition can be expected.

Second. The large farms must be sub-divided into smaller, of from 100 to 500 acres.

Third. The tenant system, for a term of years, promises the best and speediest means of procuring permanent white labor sufficient for this sub-division.

Fourth. The farmers of each county should organize, and at least make the effort to introduce the tenant system.

Necessity demands that something be *done*—and much money may be saved by their devoting some of their time, labor, and talent to a subject of such deep and general concern, instead of leaving it entirely in the hands of laborers and land-agents.

JOHN WASHINGTON.

Caroline County, February, 1868.

Westmoreland, Northumberland, Richmond and Lancaster Counties:

THEIR GEOGRAPHICAL SITUATION AND PECULIAR ADVANTAGES FOR SETTLEMENT.

Gentlemen,—In compliance with your request, I proceed to give you a brief account of this section of Virginia, its geographical situation and peculiar advantages for settlement. I shall not aim at perfect accuracy of topographical details, as these may be readily obtained by consulting the large map of Virginia.

The counties of Westmoreland, Northumberland, Richmond and Lancaster, constitute the lower part of the Peninsula, between the Potomac and Rappahannock rivers, terminating on Chesapeake Bay, and called the Northern Neck of Virginia. This part of the Neck is, on an average, from ten to twenty miles wide, and from from sixty to eighty miles long. The climate is mild and salubrious, and the lands generally dry and gently undulating. The table lands between the rivers constitute about half the territory. This

region, familiarly called "the forest," resembles very closely the famous "forest of Prince George's" in Maryland. The natural growth is hickory, dogwood, red and white oak, locust, and, on the declivities, chestnut. The soil is a sandy loam, with a clay foundation, approaching to redness, is easily tilled, and, when improved, produces heavy crops of corn, wheat, cotton and tobacco, and is particularly adapted to clover, timothy and orchard grass. It is, in fact, a natural garden soil, and by well-directed industry, may be made to produce in abundance all the crops, whether of grain, fruit, roots or grapes, known to the temperate regions. I refer to the — volume of the *American Farmer* for accounts of crops of wheat on these lands in 1850, which I know to be authentic of twenty-two and a half, twenty-five and thirty bushels to the acre. From various causes, the crops on these lands have, for some years past, fallen off greatly, but, with good seasons and proper management, would be soon restored.

The other half of the lands of these counties consists of river low grounds, varying greatly in soil, texture and productiveness. The best of these lands are of a black calcareous earth, with a marly subsoil. Some of these lands require drainage, but are almost inexhaustible. Lime and clover act upon them with magical power. Sandy loams producing heavy crops of corn, and stiff clays favorable to wheat, also constitute a large part of the low grounds. The fine lands on the Rappahannock are chiefly sandy loams. The *intervals* near the heads of the creeks make the best irrigated meadows. I have before the war, for a series of years, reaped three and a half ($3\frac{1}{2}$) tons of the best timothy and herds grass hay to the acre from such meadows, which I readily sold at the barn to Northern timber-getters at \$1 a hundred, and they greatly preferred it to Northern baled hay. Stock of all kinds are reared here at very little expense. The county has always been famous for horses, and sheep may be kept during winter on many farms without being fed. Indeed, during the war, quite a drove of fine horses, and numbers of cattle, were raised in this neighborhood on abandoned farms, without any care from their owners, subsisting entirely, winter and summer, on the natural products of the soil. Lime may be got in Baltimore at a reasonable price, or burned on the farms from shells, which abound. Marsh-mud, sea-weed and all other "marine manures," may be had in the greatest abundance, and at small cost of labor.

The whole region is peculiarly adapted to fruit of the best kinds. The fig comes to great perfection. The apricot, plum, pear,

peach and apple, and all the smaller fruits, are produced in abundance.

The population is sparse, and there is a large opening for immigrants, who would be received with the greatest kindness by our people. The society is good. There are churches and schools in every neighborhood, and living is most abundant and cheap. The finest fish, oysters, and wild fowl abound. Oysters are a source of large profit on both rivers, particularly on the Rappahannock, and profitable herring and shad fisheries on both rivers might be rented or purchased on favorable terms. Good building sites abound, and there are saw-mills in every neighborhood, where building materials may be cheaply purchased. There is still an abundance of wood and timber for those who prefer the lumber business to farming. In a word, there is no country in the world, which offers greater inducements to quiet, orderly, industrious settlers, with some capital, than the lower Northern Neck. The land is generally too valuable, for settlers, without capital, though there are some localities in which the lands may be within the reach of persons of very limited means.

The map will show that this region, on both rivers, is indented with numerous navigable streams, many of them sufficiently deep for vessels of large draft. These afford employment for schooners in carrying wood, timber, grain, &c., to market. Large steamers also navigate both rivers, carrying freight and passengers at reasonable rates. These stop at numerous wharves and landings on the rivers. We have two from Kinsale, in Westmoreland county, to Baltimore and Washington. The trip to Washington or Baltimore occupies about ten hours, and might be made in much less time by swift boats. A railroad is projected through the Neck, to communicate with the Eastern Shore railroad, by a steamer across the Bay, which, if ever completed, will bring us within a few hours of Richmond or the Northern cities, at all seasons of the year. Persons having this scheme in hand, speak confidently of getting Philadelphians to furnish capital for the enterprise. I think I may safely assume, on the part of the people of the Northern Neck, the utmost kindness and courtesy to all honest and worthy men, who may desire to settle among us, and the most liberal accommodation, both as to prices and terms, to all who desire to purchase our lands.

WILLOUGHBY NEWTON.

Linden, Westmoreland Co., Va., The Hague P. O., March 2, 1868.

[The above paper was prepared, at the request of one of the gentlemen con-

nected with "The Virginia Central Land Agency, Domestic Immigration and White Labor Supply Office," conducted at Richmond, Va., by General J. D. Imboden, and at Philadelphia by the Hon. Daniel Fox and L. R. Ashmead, Esq. Through their courtesy, and by permission of the writer, we are enabled to place before our readers a compendious, yet comprehensive exposition of the topography, water privileges and manifold advantages offered for settlement, to the better class of immigrants, in this interesting portion of tide-water Virginia which, for intelligence, refinement and social enjoyment, is second to no other section of the State.—ED. SO. PLANTER AND FARMER.]

Farm Accounts—How to Keep Them.

The essential point with farmers is to be able to dispense with all unnecessary books; in other words, to do as little writing as possible. The advantages of "keeping accounts" cannot be overrated, and to a thorough business man any arguments in favor of its use would be superfluous. It is the great conservator of finance; and is alike essential to the merchant, the mechanic, the farmer, the professional man, and the man of leisure. It not only serves as a check on extravagant expenditures, but affords us the pleasure of seeing exactly how our money has been spent, and shows at a glance the condition of our resources and liabilities. To those who feel the force of these facts, but find it difficult to reduce the theory to practice through any of the rigid forms in use, I recommend the following simple and practical form as possessing all the necessary qualities, besides being so simple and practical that a child can comprehend them. A small memorandum book, such as all stationers keep, is sufficient for this purpose, and the writing may be done either with pencil or ink.

It should be carried constantly, so that no excuse may exist for omitting the entry of receipts and disbursements, which should always be *entered at the time*. The balancing may be done daily, weekly, or monthly, as most convenient.

I would advise sub-division of accounts, so that we may know what stock is most profitable, what crops pay best, &c., and thereby acquire a great deal of useful information; though it is certainly more simple to keep only one account with the farm.

In the form below, exhibiting a page of the proposed memorandum book, we have entered the transactions for a short time only, which is sufficient to show the use of the form:

RIVERDALE FARM.—JAN'Y 1, 1868.		REC'D.	PAID.
January 1—Amount on hand	120 00		
Received for 10 lbs. butter, \$2; 10 doz. eggs, \$2....	4 00		
5—Paid for Johnny's boots. \$3; cap, 75c.....			3 75
6—Sold 10 bushels wheat, at \$1 50.....	15 00		
6—For set of harrow teeth, \$3; shoeing horse, \$1 50..			4 50
7—Paid G. Wright's grocery bill.....			17 50
10—Paid hired man for services to date, as per receipt...			10 00
11—Received for 15 bushels potatoes, at \$1.....	15 00		
		\$154 00	
		35 75	
Balance on hand.....			\$118 25
12—Sold two year old colt to C. Bliss, for.....	125 00		
13—Paid premium for insurance on buildings.....			12 50
15—Paid Mrs. M. for household expenses.....			5 00
16—Sold C S. Clarke, 20 bushels oats, at 75c.....	15 00		
17—Shoes for Netty, \$1 25; toys for Harry, 50c.....			1 75
		\$258 25	
		19 25	
Balance on hand.....			\$239 00

Just at the beginning of this may be written a list of the real and personal property and debts of the proprietor.

The form I have given is valuable for its simplicity, though it is far from being perfect. To those who wish a more elaborate form we would recommend the "six-column journal," treatises on which can be procured.

The inquiries of some one under the signature of "Farmer," in your paper, has elicited this communication, which, if you see fit, you can insert in your valuable periodical. I wish success to your periodical, that it may accomplish a glorious work for our devastated country.

ASBURY DISHMAN.

Edge Hill, King George county, March 5th, 1868.

We think our correspondent's formula of the farm account is liable to objection, from the blending of debits and credits on the same page, especially in a pocket memorandum book. We prefer appropriating the left hand page to debits and the right to credits. We also prefer to reverse the order of statement of debits and credits pursued by our correspondent, even if his formula is used. It is more in accordance with general usage to appropriate the right hand column to credits and the inner, or left hand column, to debits.—[ED. SO. PLANTER AND FARMER.

Mode and Distance of Planting Corn.

Mr. Editor,—I bought the first corn-planter I ever saw, and have used it, or some other corn-planter, ever since. But I am done with them. So long as I had my own trained negroes, whom I could compel to thin the corn to the distance I required, and to weed it properly once with the hoe, I was satisfied. But now I cannot get a hand, or, rather, a gang of hands, who will do either; and having lost seriously by their negligence for two years, I have determined to plant in checks and work my corn both ways. But no corn-planter will drop with such regularity as to enable you to work it both ways; so, if that plan is deemed expedient, the planter must be dropped.

To prepare the land, I propose to give it a deep furrow and cross-furrow with a coulter or anything else, and plant at the intersection. "With or without manure in the hill?" with, if it can be had; and in this wise:

A maul six inches long and half an inch across the end, and about four and a half inches diameter at top, will contain a pint; five and a half inches at top, a pint and a half; six and a quarter inches, a quart, or thereabouts. Make such a maul, have it turned or shaved down to the above dimensions, either of them you please, make the handle about eighteen inches longer than common, and stouter where the handle leaves the maul than common. Through this thick part bore a hole, and in that fix a pin sufficiently long for a foot-rest. Drive this maul into the hill, and it will leave a hole, into which put your compost from a measure that will just fill the hole. Make the compost of the best materials you can get, and drop the corn on it. About eighty bushels of manure, say one and a half wagon-loads, will go over an acre of corn.

What distance apart shall your corn be, and how many stalks to the hill? Doctors differ. But hear what a good one said. Land good.

"No. 1. One stalk to the hill, $1\frac{1}{2}$ ft. apart.....				14 $\frac{1}{4}$ bushels.
2. Two	"	3	"	16 $\frac{1}{2}$ "
3. Three	"	4 $\frac{1}{2}$	"	14 $\frac{1}{4}$ "

"Each parcel was five feet apart from row to row, and each parcel contained one-fourth of an acre.

"Thus it would appear that on such land as I experimented on, corn is more productive with two stalks in a hill than with either one stalk or with three; and that there is no difference in product between that with one stalk and that with three.

"My lot of three-fourths of an acre produced forty-five bushels, or at the rate of sixty bushels per acre; while the quarter of an acre, which was planted with two stalks in a hill, produced sixteen and a

half bushels, or at the rate of sixty-six bushels to the acre, being a clear gain of six bushels to the acre, merely from the mode of planting—a most important and valuable gain truly.

“The corn planted was a variety of the twin-eared prolific, and the season was a good one.”

Thus wrote in the *Farmers' Register*, vol. 2-9, p. 551, the late John Zachary Holladay, of Louisa, whose early death was one of the greatest losses our State has had to deplore in my time.

Hear another good, and able, and judicious man—the late and ever-to-be lamented Wm. P. Taylor, of Caroline :

“Experience has convinced me of the propriety of leaving at least two stalks to the hill. One-half the labor of planting and thinning is saved; and as the plough and cultivator can work across the beds, the team can perform much of the work usually done with the hoe. I believe the crop of corn is increased. Any one who will make a fair experiment, will find that corn planted two stalks in the hill will withstand the dry hot spells of our summers much better than if planted at half the distance one stalk in a hill. Last year, which was not a good one for corn, I made a trial on a large part of my field. The single-stalk corn fired earlier and more throughout than any other part of the crop, not excepting the portions containing many more stalks to the acre; and when stripped off, blade and top shewed an evident inferiority. * * * * When hills of corn are two and a half feet apart, the circulation of air is more impeded than if they were of double that distance; and an artificial heat is thus produced far exceeding the common temperature. This may be a reason for the superiority of the double to the single-stalk planting.”

He supports this reasoning by additional facts, which I have not time to quote; but for which I refer the reader to the *Farmers' Register*, vol. 2-7, pp. 1, 2. The whole article is well worth reading.

Now, I do not claim that these authorities are conclusive, though they are with me; but only that it cannot make any very great difference; and that, therefore, as check-planting two or more stalks in the hill takes less corn and less labor, it had better be adopted.

I grant it takes more labor to plant and cover the corn; but, in the first place, the labor is not then so much needed for other things; in the second place, a greater amount of labor is saved at another stage, and it simplifies the important question of thinning, nothing being left to the discretion of the laborer.

The mode of after-working I do not propose to discuss, unless it shall hereafter become necessary. Whether the land should be worked with coulter, plough or cultivator, are questions for each man to decide for himself according to the special character of his soil.

As to the distance at which the corn should be planted, I think it safe to advise that below the head of tide, each corn-plant should occupy about a third less space, in square feet, than is generally allotted to it.

FRANK G. RUFFIN.

March 19, 1868.

Raise More Cattle.

The demand of the butchers upon the veals is altogether too indiscriminate. So few of them escape the knife, that all kinds of cattle are extravagantly high. That the profitable raising of calves on dairy farms will be attended with some considerable trouble, there is no doubt; but on ordinary farms, where, as on the great majority of farms in this country, only a limited number of cows are kept for the purpose of making butter, there exists no difficulty in the profitable raising of good calves, especially by those who live a great distance from market, and where grain-growing, dairying, &c., is not profitable. Farmers are not agreed whether the calf raised shall suck or drink its milk, some practice the one and some the other method. The latter method is, however, more generally practiced so far as our observation goes. A calf that is taught to drink, it is thought, learns the sooner to shift for itself.

The ordinary custom is, when calves are to be taught to drink, to let them remain with the cows four or five days until the milk is good. This is said to be beneficial to the cows, the udders of which are sometimes hard.

As soon as it will drink milk readily, or when 10 or 12 days old, part skim milk may be added, first warming it sufficiently, with the addition of a small handful of sifted meal, stirring it while drinking; the skim milk may be gradually increased and the new milk diminished until it is about 3 weeks old, when the whole feed may consist of skim milk. The meal should be also gradually increased, as it is useless to expect a calf to thrive on skim milk alone; any kind of meal, or a mixture of different kinds, will answer the purpose. A little sweet hay should now be given.

The exact effect produced by the various kinds of food used in growing the young and sustaining the mature animal, has not been so minutely determined, practically, by scientific men, as it deserves to have been. Yet there is much more known upon this subject than has ever been practically applied by the general stock raiser,

and which, when understood and applied, will enable him to accomplish a higher result. The animal system is made up principally of muscles, bones and fat. Now, if we know what food will build up each of these parts of the system, we can feed intelligently. We must bear in mind that "like produces like." That constituent of food which produces fat will not produce muscle, and *vice versa*. We must seek food containing chemically the same constituents as the parts of the animal we wish to build up. Those who would secure animals that will pay, will keep their calves *well* for the first three or four months; for creatures starved and stunted in their youth will never make as thrifty, healthy, well-formed, able-bodied cattle, as those which had a better start in life.

A man would be counted a fool, who would plant corn without first applying stimulants to the land for the young blades to feed upon—stimulants that should early develop the growth of not only the stalk but the ear; or, who would not give early and careful cultivation to his crop. But he would be just as wise as he who undertakes to raise a good stock from starvelings. There will be no natural development of form, or any of those desirable qualities for a good milker or a handsome ox, if the calf is not supplied with such suitable food and in such suitable quantities as shall keep it growing all the time.

These considerations all having been duly weighed and regarded, the next thing to be mentioned is a suitable calf-house or pen, where the calves can be comfortable and healthy. Some believe it best to tie them up, while others would let them run loose. The place where they are kept should be well-ventilated and lighted.

Every farmer who raises domestic animals ought to understand what effect castration of a young male animal is likely to have on the proper development of certain good points, as well as what the effect will be on other points if he is not castrated. By performing this operation at a certain period, or by delaying it for a few months, or a year or more, results can be secured in developing a good form and symmetry in some animals, which never could be effected by any other means. Take, for example, a bull calf having a large head and neck, and heavier forward than behind; in short, bull-shaped: if altered when only a few weeks old, as he grows he will retain, in a measure, the same form, looking like a so-called stag. On the contrary, if castrated when only a few days old, his hind-quarters will be much better developed; and, also, his head, neck, and shoulders will be in much better proportion to the other portion of his body, as an ox's should be. On the contrary, if a

bull calf be very broad and heavy behind, and have a cow's head and neck, castration should be deferred for several months, in case he is to be raised for the yoke.—*American Stock Journal*.

Our Exhausted and Abandoned Lands.

WHAT CAN WE DO WITH THEM?

NO. III.

[Continued from page 133.]

Before proceeding with the third number of these papers, I desire to express my sense of obligation to Dr. D. Lee for his learned and able statement of facts bearing on what I had thought best to designate as a fertilizing process, always going on between the earth and the atmosphere, when the former is properly shaded and protected from the influences of the sun. It will be observed that they are intended, not for men of science and learning, but for such as make no pretension to these things; and for the great body of our laboring, agricultural population, who constitute a still more widely differing class. These, it is hoped, will be able to comprehend and appreciate my meaning and motives in these few brief expressions; whereas they might read whole pages of learned disquisition couched in scientific terms, and at last rise from the perusal with minds only darkened and confused by what would be to them words without knowledge. The words, however, would be none the less valuable to those capable of understanding them; and it is a gratification to all the friends of the *Planter and Farmer* to know that it has men among its correspondents so capable of putting things in their more scientific light.

In this connection, also, let me hope that all whose more learned and comprehensive minds might justly be provoked into a little criticism by my unscientific and, perhaps, somewhat desultory style of writing, to look with an indulgent eye upon anything in these papers which may look like needless repetition of the same ideas. The same motive—I trust a good one—underlies this also. With all my respect for the class referred to, and all the regard for their interests which induces this labor, I cannot be insensible to the truth how hard a thing it is to introduce among them a new practice in the way of their calling. There is, perhaps, no class of men whose minds, not from want of intelligence, but from the sheer influence of habit, are so apt, on the road of their profession, to run in the same rut; none who so literally require line upon line, precept upon

precept, here a little and there a little, before they can be induced to view attentively and estimate candidly, anything which has not come down to them from the practice of their fathers. It is for this reason that I have sought to repeat the leading thoughts rather than to avoid it; to turn them over and over, and present them in every varying light and shade in my power, till the ideas introduced shall have become the ideas of the reader—the reasonings and thoughts of the people. If they are worth anything, the more effectually they are impressed and fastened upon the mind, the better. The system to be unfolded, if it deserves to be dignified with that appellation, will be found, when it comes to be fully brought out, to be somewhat new, if not in its details, at least in its leading outlines; and I trust the attentive reader will, by that time, be satisfied that in the process of restoring our worn-out lands, it is proposed to apply to them something rather more substantial than mere shadow, however true, in a figurative sense, that they may be made to feed upon it.

But before proceeding to reply to the inquiry, What can we do with these lands? it becomes expedient to give a passing notice to one or two theories connected with the management of the soil, at present much in vogue, and for years past—perhaps ages—received with implicit confidence by all, the practical and scientific, no less than the unskilled and ill-informed; but which have long appeared to the present writer as of doubtful soundness in these low latitudes, to say the least of them! The discussion, though of some length, will not, I hope, prove devoid of interest; and will be found to have its bearing on the general subject, in the end.

The first of these is the doctrine of ploughing in green crops, as a means of promoting fertility.

That this practice may be made such a means to some in any latitude, and in any soil at all capable of improvement, will readily be admitted by all. But that is not the real point at issue. The true question is, Is it not, after all that has been said and all that may remain to be said in its favor, only a comparative means, which had better be laid aside at once and forever for one of greater practical utility? In the Eastern and Middle States, where the sun, during the months of August and September—in this latitude the usual season for ploughing preparatory to wheat—does not pour down as it does here with a heat that depletes the earth like a horse-leech, this course may answer a better purpose than with us, where the great thing which the land requires is protection against such exhausting influences. Few things, it would seem from observation,

are more certain in any science than these two in agriculture: first, that no sooner is the earth exposed to the sun in any latitude, but always in direct proportion to its nearness to the equator, than it begins to part with its power of production; and second, that wherever it is well-shaded and protected from the sun, it at once begins in some way to secrete the elements of fertility, and to lay them up for future use. What is it which occasions the blackness observable in the ground wherever vegetable matter has collected and lain upon it for any length of time? It is the presence of humic acid, generated in the laboratory of nature by means of this protection; yet, in some instances, we can scarcely see how. In that bare spot of hard red clay, for instance, on which, a few months ago, a load of forest leaves was thrown, there was apparently nothing from which the acid might evolve, while the leaves themselves, as far as human vision can discover, have lost neither form nor substance; yet humic acid has got into it in some way; for the clay has become dark, friable, and evidently better fitted for producing, while all around it, where the leaves did not reach, remains as it was, red as vermilion, and hard almost as a brick-bat. Now, however agricultural chemistry may explain and make it palpable and satisfactory to the learned, here is a grand, unmistakeable fact, standing out to his view, and teaching the farmer a great practical lesson, just as forcibly as if science had made it all plain to him as day-light. It speaks to him with a trumpet-tongue. It teaches him how he may bring fertility to his soil. It lifts up its voice, and pleads for protection. In language not to be misunderstood, it says to him, cover up the earth! cover up the earth! cover up the earth! Cover it up, and keep it covered, as deeply as you can and as long as you can, consistently with that stirring which it always must have preparatory to the introduction of fresh seed: the longer and the deeper, the better. In this way, it will be brought within the influence of the fertilizing process; and in this way, his land, like Jack's tree, which his father told him would be growing while he was asleep, will be gathering strength and productiveness while the owner is taking his ease.

If it is inquired how this covering is to be effected, the reply is, it is the most easy, simple, and practicable thing in the whole world; for all a person has to do is to cease uncovering. All that is necessary, is just to let the land alone after harvest, and it will cover up itself without any assistance from the owner, just as it covers itself in the woods without the aid of man, and year by year grows stronger and richer by so doing. But now, he who ploughs in a green crop exactly reverses this process. He uncovers. In that

way he not only exposes the earth to the sun, by which the moisture is dried up, the gases dissipated, and their action in the evolution of inorganic matter made to cease; but he puts a stop to the entire fertilizing process in every step of its operations. And not only so, but he buries down beneath the surface a mass of organic matter, perhaps a foot deep, where, according to Prof. Norton, "it will remain unchanged for years," doing no good to the crop immediately succeeding, and, probably, by fermenting and turning acid, proving an injury to it rather than a benefit. Such a man, by uncovering in this way, opposes nature; he flies in her very face, and bids defiance to her most obvious laws. The forest never uncovers; never ploughs under. She invariably covers up; depositing all her fertilizing matter on the top. Yet, there she has stood for centuries and tens of centuries, yearly parting with her nutritive elements, organic as well as inorganic; her carbon, her hydrogen, her oxygen and her nitrogen, her lime, her soda, her magnesia, chlorine, phosphoric and sulphuric acids, silica and all; but so far from being exhausted of these, growing richer in them every year, and more capable of sustaining the increased growth of her trees.

The brier-patch never ploughs under a green crop; yet, look at it! There it has been for these ten or fifteen years, taking care of itself. Observe its tall, stout, healthy-looking canes! How rampantly they grow! How luxuriant they look! See its leaves! How deep and rich their green! How long they grow, and wide they spread, and how thick they feel to the touch compared with the tiny, stunted things on other parts of the same field, where each one is standing by itself, receiving and forming no protection for its roots. And then its fruit! How large it is! How soft to the touch; tempting to the eye; sweet and delicious to the taste! Is there to be found on your premises elsewhere anything to be compared with it! Yet that brier-patch has all this time been living upon its own leaves and, in a figurative sense, upon its own shadow. It has been covering up the ground; putting nothing under the surface, but everything upon it; shielding itself, and finding its salvation in protection.

Yonder apple-tree, that looks so stunted, ragged, gnarly, and ready to perish—producing some half a bushel of fruit yearly, crabbed and sour enough to make any pig squeal that happens to get hold of them, has been standing there for about a quarter of a century. The cattle have had free access to it, getting under it for shade from the heat and shelter from the showers, till they have tramped the earth round it hard as the public highway, and made it

as barren. From this hard surface, everything has been carried off by the wind and the rain, so that the roots are at last seen lying along on top of the ground—instead of under it, where they ought to be. The sun, all this time, in its unmitigated heat, has been pouring down upon them, evaporating all moisture, dissipating the gases, and scorching out their very life. In a word, the uncovering and unprotecting process has been applied to it thoroughly; and what is the result? The results are that the tree is, and always has been, and will be, an eye-sore; utterly unprofitable to its owner; its fruit never worth the gathering.

But near it is another tree, transplanted at the same time and in the same manner, and at the same age from the seed; but this from the beginning has been the object of protection. The owner simply threw around it, at the outset, a few armfuls of straw, making a circle of about ten feet in diameter. Over and around this, he threw brush from the woods to keep the mulch stationary and the cattle at a distance, and then left it to take care of itself, with the single exception of rooting out any shrub or tree that happened to spring up beneath or near it, and to guarding it against the attacks of mice. The result has been a beautiful thrifty tree, such as it affords one pleasure to look at; from fifteen to twenty bushels of fine fruit, annually, for the last fifteen or twenty years, with the fair prospect of as much more for fifteen or twenty years to come. Lo, the result of protection! The tree has fed, upon what? Not upon that little straw alone; not upon that little brush; but partly on these, which, of course, have been replaced as they have decayed and wasted away, and partly on the shade of its own more goodly branches, and on its own fallen leaves, which the brush and straw have kept from being swept away and carried off. These together have preserved moisture; the moisture has developed carbonic acid; the acid has decomposed certain minerals and liberated their salts; in a word, the fertilizing process has been applied to it, bringing to bear upon it all the elements, organic and inorganic, necessary to its nutriment, growth and productiveness. All these have been there, holding high carnival among its roots and its rootlets, its leaves and its branches, soda and silicia, and sulphur, and magnesia, and potash, and sodium, and lime, and sulphate of lime, and all the family of the phosphates, and carbon, and hydrogen, and nitrogen, and oxygen playing about it, and ministering to it, and cheering it on, till it has entered into the very spirit of their merriment; and you can almost see it dance and hear it clap its hands! And all that in return for just a little straw and a little brush once in two

or three years. Verily, a small outlay for so large a return! What would the return have been had there been thrown over the straw, every year, half a bushel of lime, or a bushel of ashes? Probably two-fold, to say the least. But what we wish particularly to be observed is, that there has been no ploughing in of green crops about this tree—no turning under; nothing of the kind. A better philosophy has guided the course of that uneducated, unphilosophical farmer, that simple but earnest observer of nature, who has been looking at her works, and taking his lessons from her laws. His studies have been, not the tomes of the wise and learned, though he would by no means undervalue or slight them, if he had them to consult, but the forest in its unfailing, unwavering progress; the brier-patch in the fence-corner; the peach tree in a similar locality; the young hickory that has volunteered among some collection of neglected logs, or has shot out from under some prostrate, mouldering tree; the grape vine that runs clambering over its neighboring oak, and weighing down its branches with large, luscious clusters, but having its roots under a pile of unsightly rocks, or amid the rubbish of some old tumbled-down fence, where weeds have grown and fallen and died upon them, and grown and fallen and died again, year after year, till they have spread over them a mass of deep vegetable mould that supplies them, directly or indirectly, with all the elements of growth and fruitfulness. All these have been teaching him, during his whole life, that nature does her work mainly upon the surface, not under it. In every one of these localities he has found, on examination, that the soil is there deeper by inches than it is anywhere around and near them, exposed to the sun. There the gases have gone down under the protecting shade and masses of matter through the soil into the subsoil, converting poor surface and hard red clay beneath it into rich, productive mould. Is it to be wondered at that such a man never thinks of ploughing in a green crop? The wonder would be if he did; for nature has taught him a more excellent way. Nor is the time far distant, I think, when, in these low latitudes, this doctrine will be utterly exploded, as a practice by which, comparatively speaking, we lose more than we gain. The question resolves itself directly into the cognate question of surface and subsurface manuring, the comparative efficacy of which can hardly any longer be regarded as a mooted point. It is, on the contrary, a point which facts have so nearly and so fully decided, that men of observing and reflecting habits no longer feel much doubt respecting it. Through all her unrestrained operations, nature teaches us that the surface is the

point to apply the manure, from whence, in conformity with her laws, it is distributed to the leaves and branches as well as to the roots and rootlets of plants; that which is intended to go up, going up as fast as freed by the action of the sun and air to be absorbed by the foliage, and that which is intended to go down, going down to feed the roots by laws equally peculiar to itself. The time is at hand when ceasing to counteract nature, men will open their eyes to her embodied teachings, and will act upon them; when they will consult her more studiously and reverently, and will listen more implicitly to her voice. The advocates of green cropping tell us of matter thus added to the soil; but, after all, would not a greater amount of such matter have been added, in any given case, if the crop turned under had been suffered to remain upon the surface and decompose there, where alone it will decompose rapidly and perfectly, so as to benefit the immediately succeeding crop, as the wheat straw did, to which reference has so often been made? Most men would have ploughed that straw under, as soon as they discovered the failure of the grain. To my mind, however, reason pointed out the other course; and the result certainly seems to have sustained the correctness of the decision, confirming the idea that ploughing down dead matter—matter that has died upon the ground—and mingling it with the surface instead of ploughing it under while green, is the wiser plan. It is the great leading feature in the poor man's system—protection. It helps to retain moisture, which Dr. D. Lee has so well shown is one of the great agencies in developing and calling into action the resources of the land below. I cannot, however, but regard the question, how the soil gets its inorganic matter, as a question for the curious rather than as one of great practical importance to the farmer; for whatever may be our opinions upon that point, the grand truth is none the less certainly established, that the ground, wherever it is properly protected, gets its supplies of inorganic matter somehow and somewhere. It got it for that crop of corn, though it would seem as if the sixty years of previous cultivation in that grain must have exhausted the last particle of most of the inorganic matters—phosphoric acid, for instance—necessary to the production of it. What could have restored it in such quantity in one year's cultivation in wheat, as to make the land capable of producing full fifty bushels to the acre? I answer, chemical agencies acting through the medium of protection. It is protection, then, that we want, with the means that afford it given back to the land. It is in this way that the forest gets it and keeps up the supply, notwithstanding the loss

by annual consumption. In the same way the brier-patch, that has sprung up upon a denuded surface of hard, red clay, gets it; the ground under a decaying stump, or a brush-pile, or a heap of rocks, gets it; and there Chemistry, with her analyses, may find it, in each case severally, in more or less abundance, when she may not be able to detect it at all in ground exposed to the sun a yard or two distant. Thus, then, whether in regard to organic or inorganic matter, we are brought back to the same grand principle, that if we only leave the land to itself, by allowing it to feed upon its after crops of weeds and grasses after its crops of grain have been taken away, it will preserve itself; if we thus leave it to itself, it will improve itself; nay, it will even restore itself, and raise itself, from the depths of poverty and the verge of ruin up to the very summit of agricultural wealth and worth. Such is the excellence of this system, a system founded in nature, and, therefore, commensurate with her wants, and it is the still more marvellous excellence of it, that it is the poor man's system; that all this self-preservation, self-improvement, self-recuperation, may be effected without care, without toil, without expense to the proprietor. It calls upon him for no outlay whatever, except so far as it may be involved in keeping up fences to keep off stock, and, here and there, in supplying a little manure of some kind to get a start of weeds to begin with. It relieves him even from the necessity of buying clover seed, or seed of anything to be turned in as a green crop. All is left to nature: The friendly weeds which, with some few exceptions, perhaps, are in low latitudes our best friends, will supply him with something instead, which, if not quite so good as clover, will yet effectually answer his purpose. The entire work will be done for him; done while he is busy at something else; done while he is taking his ease, or pleasure, or even while he is asleep. He may take pains, to be sure, to accumulate manures, and to apply them from his own resources. He will be a dunce if he does not; for by every effort in that way, he will accelerate a process which, though certain in the end, will, for a few years, be necessarily slow, but even without this, if he will only be firm and faithful in allowing to his lands after he has taken off their yearly produce, all they can do for their protection and sustenance, he will find that his income is increased from them every successive harvest, and that, in a few years, without a dollar's expense for artificial manures, he will have exchanged his cramped, embarrassed condition for one of comparative independence and ease. It must be so, or there is no confidence in facts—there is no reliance upon nature.

T. S. W. MOTT.

Agricultural Education.

FARMERS' CLUBS.

Although the farmer has hitherto paid but little attention to education, yet the present indications are very encouraging. A spirit of inquiry and rivalry has sprung up all over the country. Fairs are more generally attended, clubs for discussion and experiment are formed, and agricultural papers much better sustained. One of the most important means of exciting the interest of farmers in improvements in agriculture is in the formation of farmers' clubs. They have uniformly had a good effect. Wherever clubs have been formed by a few persevering individuals, who would see that the meetings were always held at the appointed time, a general interest has soon been awakened in them. And these club discussions are admirably calculated to correct erroneous ideas of those taking part in them. One comes with some pet theory, which he supposes himself abundantly able to maintain, but soon discovers, when subjected to sharp criticism, that he has built upon the "baseless fabric of a vision."

Another comes with some innovation upon immemorial custom, and he finds himself beset by conservative ideas on every side, but having experimented and become familiar with the question, he is able to parry all their thrusts, explain all their objections, and, although not perhaps able to convert them at once to its practice, yet he has made an impression which will have its effect in the end.

The principal reason that farmers make such slow progress in their business—are so slow to adopt improvements—is to be found in their isolated situation, their want of social intercourse. Not many men adopt new things alone. They fear the unfavorable opinion of neighbors. Men prefer to be in magnetic equilibrium with the "rest of mankind." They go with the crowd—move in masses and are carried along by social contagion. They seem to be excited only by social contact, and to progress only with the current. This law of our natures shows the great importance of these clubs to the farmer. A man who would be very timid to adopt an improvement urged upon him alone, would enter into it with zeal when adopted by the club—when he had the countenance and encouragement of his neighbors. Mechanics are congregated in cities, have frequent intercourse with each other, and are swift to adopt a labor-saving invention in their business.

But farmers are scattered over the country, and occupy themselves too constantly with physical labor on the farm. Too much

muscular exercise wearies the body and indisposes the mind to exertion. The farmer has too long regarded his calling as a physical mission, requiring little or no effort of the mind, but a constant tension of muscle. Anything which should induce them to congregate together socially would be a great blessing, but still more so when this meeting is for the purpose of comparing notes upon their occupation.

It would surprise a body of farmers, who had never tried it, to find how much knowledge could be gained upon almost any subject connected with agriculture, from twenty-five average farmers, who should each contribute the facts he knew relating to it. Perhaps no one of the twenty-five would be able to give more than a few facts concerning the topic, yet when each had contributed what he knew, the subject might be thoroughly elucidated and easily understood. When they come together no one fully understands the subject, but when the discussion is over every one might carry away a full knowledge of it.

And this leads us to speak of the proper *method* of conducting these *Farmers' Clubs*. First, there should be as little formality and as few rules as possible, consistent with good order. Select a man of prompt decision and few words as chairman, and the most ready-writer for secretary. Avoid set speeches and prepared dissertations. You come together to communicate facts and not to display rhetoric. Any one who has a fact to give should be welcome. It should be a meeting for a free and informal interchange of ideas in the conversational way. This will be found much better and more profitable than debate. You cannot well debate a question without the disputants becoming interested for triumph in argument—for the success of a side—and this is not the object of discussion. The object should be to gain knowledge, to accumulate facts on which to base a right decision, and not to display ability in argument, to triumph in disputation. Suppose the question were the “best time to cut wheat?” It is obvious that well-attested experiments bearing upon this subject would be necessary to determine it. Every one who could give any fact showing the effect of cutting wheat at a particular stage of growth would assist in elucidating it. One could perhaps give the effect upon rust, of cutting wheat while green, showing the quality of the grain to be little injured by it; another cut it when ripe, and the rust had ruined the grain; another states that he cut before ripe, when no rust appeared, and found the berry plump and got a larger proportion of flour per bushel than when he had cut on full ripening. And thus one after another gives his ex-

perience upon all sides of this question, until the facts render its solution clear. Now, a learned dissertation upon the wheat plant, with an ingenious theory, unaccompanied by facts, might lead to a different conclusion, and gain applause to the speaker, but not being based upon a true foundation, would only lead those astray who acted upon it. There can be no objection to an occasional essay upon some subject by one who understands it practically. This should be a feature by itself, and would be an important source of improvement; but the discussions should be conducted in the freest and most informal manner. Besides, this method of conducting the discussion would have the advantage of making every one a participator in the proceedings, and thus interest him.

Every farmer can find language to state a fact in reference to a subject, who, most likely, would not feel competent to make a speech maintaining a theory, and, in fact, all theoretical discussions should be avoided, except as they grow out of well-established facts. Theories sometimes cause experiments which lead to important discoveries, and in this way tend to increase knowledge, but too often theory is advanced as known truth, and when acted upon as such may lead to disappointment and disastrous failure. Theories are already too abundant, but for well-ascertained facts, very great need. These club meetings excite the minds of farmers to greater activity, stimulate them to read upon the subjects to be discussed, learn them to sift evidence, to give facts and experiments their true weight, to value order and methodical arrangement. In short, for farmers now on the stage, who have passed all opportunity for an elementary education in agriculture, the farmers' club offers the greatest practical advantages. And the effect would soon be seen in the improvement of their implements—the bringing into use their waste fields—the saving and use of all their manures—improving the breed and condition of their animals, and in the whole order and arrangement of their farming operations.—E. W. S., in *Moore's Rural New Yorker*.

WHAT CHRIST ADDS.—Temporal mercies without Christ are like ciphers without a figure; but when you have these temporal mercies, and Christ stands in front of them, oh, what an amount they make! Temporal mercies without Christ are unripe fruit; but when Christ shines upon them they grow mellow and sweet. Temporal mercies without Christ are the dry rivers—Christ fills them to the brim.

Periodicity in the Seasons.

Remarking on agricultural periodicity, the *Maryland Farmer* observes :

“It has been, for many years, a favorite theory of some observers, that seasons, very similar to each other, recur at stated intervals, whilst others have gone so far as to contend that they move in regular cycles, changing gradually from rainy to dry and from hot to cool summers, and from moderate to severe winters, and at the completion of the cycle reversing the phenomena year by year, from dry to rainy, and from cool to hot summers, and from severe to moderate winters. The terms usually allotted are seven and fourteen years, but thus far no meteorological laws have been discovered to justify this theory of atmospheric changes, or to furnish data upon which such changes may be confidently predicted.”

This conclusion, all things considered, seems a legitimate one and accordant with facts as they transpire from year to year without reference to any particular series.

That the seasons should possess a general family resemblance seems a matter of necessity, so long as the sun is the great source of light and heat and the earth continues to make its annual circuit around it with uniform velocity. But there are influences at work on the earth, which tend to change or considerably modify the character of the seasons in particular localities—substituting comparative aridity for excessive moisture in summer, and increased wind and diminished snow in the winter. These changes will scarcely have escaped the notice of those who pitched their tents in a wooded country, with but here and there a log cabin for many miles, and remained there till the axe, in brawny hands, had let in the sun and wind upon what before was comparatively perpetual shade and oppressive stillness. Then, the summers were noted for the almost daily occurrence of showers and the winters for the depth of snow which covered the earth. But, as the forest trees fell before the axe, and their several trunks melted away in glowing heaps, the summer showers became less frequent, the winters less prodigal in snow, but increasingly affluent in winds, searching and pungent in their character. These climate modifications bore no perceptible relation to any particular cycloid of years, but were seemingly wholly, or mainly, dependent upon the velocity and pertinacity with which the axe performed its office. These changes, too, have been followed by consequences, to the farmer, little thought of at the time the onslaught was being made on the primeval forest. The

woodman then, but agriculturist now, saw in each forest tree an enemy to be slain, and he went forward like a destroying angel, sparing none. The stately tree which had breasted the storms of a thousand ages, and the modest sapling reposing beneath its sheltering branches, met a common fate. "A clean sweep" was the word, and the consequence now is that the blasts of winter repeat it as they course over fields without check or hindrance.

In thus denuding his land for long distances of any forest shelter, the farmer made a mistake as he removed what, in suitable places, should have been left to protect his own domicile and the fruit orchards which are essential to and give finish to every well-regulated farm. Regrets for the hasty action of the past will not repair the evil done, but they may induce an attempt to modify its effects by interposing new forest barriers in such places as will best serve as shields to the dwelling, stock, barns, and the fruit orchards. It is true, the parties most in fault may be stricken in years now, with no prospect of profiting by a late atonement, but they have descendants who will appreciate the comforts supplied by a change of policy and hold in grateful remembrance those to whom they will be indebted for them. Plant trees, then, to modify the rigors of the seasons, protect your homes and their surroundings, without reference to the question as to whether the seasons are cyclical or the reverse.—*Moore's Rural New-Yorker*.

About Weeds.—No. 2.

HARBORING PLACES.

The bye-places of the farm wherein weeds harbor comparatively unnoticed and unharmed, are prolific sources whence they spread, and strongholds last taken by the aggressive farmer. To the easy, slothful farmer, they are impregnable, and from their commanding position, hold his passions forever under dominion. Prominent among these harboring-places are the fence corners, and they are especially favorable to the weeds when partly filled with rubbish or stone from the fields. There new varieties are often first introduced by means of birds, or from the fence opposing a barrier to those downy seeds that float in the air. There, too, the seed finds a congenial place to grow; there is shade, a rich soil, and they are undisturbed by machinery. Often the rubbish or stone piles are so dense as to protect the weeds against the farmer's efforts to uproot

them. Consequently, they mature their seed, and it is scattered. A patch of couch grass may exist for years in a fence corner unnoticed; but when its creeping roots strike out far enough for the plough to tear them, they are distributed far and rapidly over the field, and every joint becomes a new plant wherever it permanently lodges. Eradication, then, is nearly impossible. The road-sides, which ought to be scrupulously kept clean, are too often safe harboring places for weeds. Manure heaps containing the seeds are frequently neglected until the vigorous growth induced has brought the plants to maturity; and many spots around farm buildings and yards are unsightly from a dense annual growth of weeds. In short, the farmer may set it down as an axiom, that wherever on his soil a useful plant does not grow, a weed will flourish and occupy the room. Nature abhors an unprolific soil. It is the farmer's business to see that all plants which grow on his premises are beneficial to his interests.

HOW WEEDS WORK INJURY.

If farmers would more closely consider the detriment to their interests which arises from the presence and growth of weeds in the soil, they would be incited to greater and more united effort to accomplish their extradition. Fertility of the soil is diminished mainly by the crops grown on and removed from it. Weeds rob it of much plant food without returning any equivalent to the farmer, and in most soils available plant food is not so abundant but that the growth of weeds diminishes the yield of the cultivated crop exactly in proportion to the amount of the elements of that crop thus abstracted. Let any farmer observe his fields closely at harvest time, noting the great variety and mass of plants which the soil supports, besides the crop he cultivates, then estimate the increased yield which would have resulted had the elements which formed these been given to the crop, and he will feel in his pocket how detrimental to his interests are the weeds. The hoed crops yield most abundantly, and to their comparative freedom from weeds this result may be chiefly ascribed. And here we will suggest that good farming demands that all grain crops be cultivated at different stages of their growth.

Besides the loss weeds occasion the cultivator by diminishing the yield of his crops, they impose on him a large amount of unremunerative labor. In fitting the ground for sowing the seed, in cultivating, harvesting and cleaning the grain, the presence of weeds in the soil and crop causes much extra work to be performed. Loss

also occurs through the deterioration of crops in value when weeds or other seeds are mixed freely with them.—*Moore's Rural New-Yorker*.

Immigration.

Among the immigrants now landing in the United States is a far larger proportion than formerly of skilled artisans. Especially is this the case with those who have lately left the United Kingdom for this country. Weavers, miners, iron-workers, and other good material of a similar kind are coming hither from England in sufficient numbers to awaken some alarm there, lest the productive power of that nation should be seriously crippled. The *London Times* recently referred to this subject, and spoke with "regret" of the "emigration of skilled laborers from the coal and iron districts of South Wales. Of the hundreds who have thus left, and the hundreds more who are on the point of leaving, between eighty and ninety per cent. proposes to settle in the United States." We have room and work enough for them all. The fact that they come to our shores instead of seeking the Dominion of Canada, Australia, or New Zealand, is easily enough accounted for—*i. e.*, from the American point of vision. Notwithstanding all that has been said and done which is not pleasing to us, we believe that the United States, before any other country on the face of the earth, is the place for the poor man of steady industrious habits.

The sections of the annual report of the British emigration commissioners relating to Ireland, show that the Irish population is decreasing by emigration in a ratio largely in excess of the rate of its increase by births. The commissioners remark that the increase of population by births must principally depend on the proportion which those between the ages of twenty and thirty-five bear to the rest of the community. The proportion of such persons in the population of the whole kingdom is about twenty-five per cent., while their proportion in the emigration of the present day is more than fifty-two per cent.

Of the whole Irish emigration of last year, 87.56 per cent. went to the United States; these emigrants are by no means paupers. Their circumstances are shown by the passenger accommodations they select on leaving home. In 1863 the proportion of those who emigrated in steam vessels was 45.85 per cent. In 1864 it was 53.55; in 1865 it was 73.50, and in 1866 it was 81.16 per cent. Steam transportation during those years averaged about one-third dearer than passage by sailing ships.

The German immigrant generally brings money with him, and so does the Swede. In fact, immigration at the present day adds more of real wealth to the resources of this country than it ever before did. It gives us energy, industry, and gold; and they were never more welcome.—*N. O. Crescent.*

Deep Tillage Necessary to Effective Surface Drainage.

Any one of habits of ordinary observation must have noticed the change which has been wrought upon the face of a large portion of Virginia within a comparatively few years. This remark is applicable particularly to the tobacco-growing regions and to such of these as are to the south of James river. It has not been many years ago that the lands lying along the small rivers—creeks and their branches—were looked upon not only as the most fertile portions of the cultivated soil, but as, in the main, the most likely to make remunerative return to the agriculturist for his labor.

These small streams ran along well-defined channels of some depth, and ordinarily well-drained the low land through which they passed. It is true, that in many cases the lands were overflowed in time of freshets. But the floods lasted not a great many hours, after which the stream returned and confined itself to its usual channel, while the adjacent lands were soon dried by drainage and evaporation. While, therefore, some few crops were lost or injured by freshets, it still remained true that the average returns to the farmer from his low lands were greater than from the high. But what is the state of things now? Over a very large portion of the once arable flats of Virginia the waters or mud and ooze, with bull-rush, cat-tails, cray-fish, tad-poles and frogs, hold almost undisputed sway. In other places a scanty pasturage for a portion of the year is afforded upon the ridges that have been left between the broader stretches of the marsh or morass into which the low lands have been converted. In some portions of other places a very coarse hay is cut when it is not too much covered over with the mud and slime of overflows, which is more usually the case. In still other places the farmer even yet ventures to plant his corn or to sow his oats, but he does so in fear and trembling. The chances are in favor of his losing at least some portion of his crop by freshet or the presence of too much moisture in the soil; while it is only when the season is very dry that he can look for any considerable yield. For some reason or other his creek-banks have become lower, the bottom has

been raised, and sand-bars have been found every few yards. His ditches cannot be kept open, but fill up with every considerable rain. There seems no possibility of confining the water to creek and ditches after even a moderate rain, while with his channels for drainage filled up, his land remains sobbed with water—cold, stiff, acid and unproductive.

We think no one will deny the truth of what is above said. What, then, is the reason for the change already effected, and which seems going on at even an increasing rate? Are the falls of rain greater or more frequent than formerly? The meteorologist tells us not. The rivers carry no more water than formerly to the sea. The general water-shed of the country has not been altered. Why is it, then, that our creeks overflow so much more readily than formerly, that their banks are lower, the adjacent grounds so much more constantly saturated with water and rendered so nearly worthless for all the purposes of the agriculturist?

It cannot be due generally to mill-dams which have been thrown across the streams, for the effects spoken of are seen far above them and where the velocity of the water in its now shallow channel is still rapid. If we will consider the changes which have been taking place upon the cultivated or impoverished and abandoned hills, the answer will not be hard to find. These hills, which were formerly occupied by forests which, with the matting and interlacing of their roots and fibres, prevented the surface of the soil from being washed away by the waters of superficial drainage, now have their sides torn and disfigured by gullies of every imaginable depth and width.

The soil of the hills is no longer protected by the roots and leaves of the forest, and great care seems to have been taken that no other growth that could afford protection from the wasting waters should be allowed. In cultivation, the earth has been broken only a very few inches, so that the rains could not pass off by sinking through the sub-soil, but must per force run off upon the surface. No pains have been taken to supply a sod of grass to protect and fertilize the ill-treated soil, while the agriculturist has been taking from it his crops of tobacco, wheat, corn and oats in rapid succession. The little film of soil that has been kept light and friable by the method of cultivation adopted, has therefore been completely at the mercy of the rains to carry it whither it would. The hills have, by consequence, been borne to the bottoms by the waters flowing in gullies and ditches. The materials which could be easily carried away by water moving down the inclined surfaces of our hills cannot be so readily moved where the slope is diminished. Of course, then, the

washings of the hills must fill up ditches and creek channels on the flats and must reduce these flats to unprofitable marshes.*

What shall be done to stop this process by which the injury of the high lands is, at the same time, ruin to the more level? In vain will any farmer open his ditches, if his gullies, unstopped, continue to hurry down their regular freight of soil, clay and gravel.

The evil of which we have been speaking is a general one, and the remedy, to be effective, must be of a corresponding extent in its application.

Unless our landholders adopt some method of cultivation by which the hills shall be protected from the corroding and transporting agency of the gathered waters of our rains, the labors which they may spend upon improving the drainage of their low grounds, will be, in large measure, unproductive of useful results. The land must be kept porous, mellow and open to a good depth, so that superficial drainage may not be so great. This can only be done by *deep and thorough* ploughing.

The soil must also be carefully protected when not in cultivation, by some grass, which will furnish a sod which can resist the action of running water.

By careful attention to the growth of grasses, and by more thorough cultivation than has prevailed hitherto, we may hope gradually to restore the fertility of our wasted hills, and to reclaim our flats from the domains of frogs and mud-turtles.

To do this, the people *generally* must feel the importance and urgency of the matter, and must conspire earnestly and energetically in their efforts to bring back beauty to the once fair face of our country.

H.

* The washings of the hills since the land has been brought into cultivation have rendered the streams so much more muddy than formerly that even fish cannot live in them as they once could.

Fodder for Stock.

It is probable that considerable land designed for corn the present spring will fail to be planted on account of the prevalence of wet weather. In such case, it would be a good plan to sow corn for fodder purposes. Good land will produce a heavy burthen of this kind of food for cattle. It is especially good for dairy stock, and may be fed in a green or in a dry state. The sweet variety is considered the best, as it is richer and eaten more readily than any other. What is not used in a green state may be cut and dried for winter use. It may be fed whole, or cut up and mixed with something else, as circumstances shall dictate.



Horticultural Department.

Agricultural and Horticultural Societies—Premiums.

A note from the President of the Rockbridge A. & M. Society, (Jacob Fuller, Esq.,) informs us that the executive committee of that body propose to offer as premiums at their annual Fair, to be held next October, standard works on Agriculture, Horticulture, Mechanics, &c., copies of leading periodicals upon these subjects, as well as Fruit Trees, Grape Vines, Flowers, &c.

This is a step in the right direction. Such premiums would be far more desirable than even their value in money, and we know of no means better calculated to push forward the interests which these Societies are formed to promote. Few persons compete at these fairs for the sake of the intrinsic value of the premium, and even such as do will find this character of prizes more useful than any other. To make such prizes redound to the credit of the Society offering them, as well as acceptable and valuable to the public, it will be necessary to exercise great care and caution in the selection of articles thus offered, and the committees, whose duty it is to procure and designate the premiums, should be composed of men who are practical agriculturists and horticulturists, that no deception may be practiced upon them as to the worth of the articles.

As this opens such a fine field for advertising to publishers, nurserymen and florists, it will be eagerly seized upon by all who are anxious to keep themselves before the people, and, in many instances, no doubt, parties will offer to contribute voluntarily such things as may be required for the premium list, and frequently these contributions will be of no value, so that, unless skilled parties have the management of the matter, the whole plan will soon fall into disrepute. The only safe mode is to accept donations from none but known and reliable sources, and if these should

not be sufficient, to purchase from such parties the requisite quantity.

By following this course, the imprimatur of the Societies will soon become as desirable to publishers and growers in the premiums offered as in the awards granted, and the public will entertain such confidence in the reliability of the articles offered, as to make them far more anxious to contend for premiums than they have ever been under the systems now in vogue.

We recommend the matter to the attention of our Agricultural and Horticultural Societies, and should be glad if the President of the Rockbridge Society would give us, in detail for publication, the plan which he proposes to adopt.

Planting Vines Deep.

Mr. Editor,—I notice in your paper for February an article under the head "Planting Vines Deep," in which the author states "that walling to prevent their extension, causes them to seek food below the genial influence of light and air, and thus create disease." The article states the fact also, that wild grape vines are surface growers, and argues therefrom, it is the proper mode for cultivation. Nothing can be more fallacious. Did the writer ever see a wild grape, of even tolerable quality, when compared with the domestic grape? Yet, it is conceded, all the present varieties came from one parent stock. Whence, then, the great changes? Unquestionably, soil and cultivation. The grape producing the finest Hock wines, transplanted to Maderia, produces the finest Madeira wine, and even there very different wine in different localities.

An article on the culture of the grape, published in England in 1826, says: "The mode of culture of vines in Madeira may probably suggest some hints for their growth in the open grounds in this country. The slips or cuttings are made from a foot and a half to two feet and a half in length; they are set two feet in the ground, about three feet distant, in straight rows or trenches, about four or five feet apart. After one trench is opened and the earth taken out and laid on one side of it so as to form a bank, the butt ends of the vines are put into the bottom of the trench, and the small ends extended sloping up the bank; the trench is then filled with earth dug from the sound side," &c., &c., &c., the earth from each succeeding trench being used to fill the preceding one. Here, two feet is stated as the usual depth for planting. A small volume on European

Grape Culture, published (I think) about 1854, in speaking of the increased longevity of the vine in Madeira, ascribes it solely to the increased depth given to the plantings; stating the depth of six and eight feet having been reached by the most successful growers. I regret I cannot find the copy I had, nor can I describe the book so as to secure one by purchase, I therefore quote from memory. The article quoted above, goes on to state: "A vineyard planted in this manner (two feet deep) will, it is said, last from fifty to sixty years." This writer gives very minute details as regards the culture of the vine from its planting to its full maturity. I do not suppose, however, you care to fill your pages with experiences forty years since.

Very respectfully,

Your obedient servant,

PHILO.

Amelia, February 25th, 1868.

Editorial Comments on "Philo."

In the February issue, we published an extract from the *Horticulturist*, opposing the deep planting of grape vines, and concluded by asking some one to assign a reason for what we considered a strange and hurtful practice. Our correspondent, "Philo," in this number, takes issue with us, and defends deep planting, without, however, assigning any reason for it, except the statement from some author, that it was the practice so to plant in Madeira. Our reason for advocating shallow planting was that the roots might have the benefit of light and air; and to show that atmospheric influences were desirable. We cited the fact that the roots of wild vines sought the surface, and it is well known that a wild vine never dies, except by down-right murder. We, therefore, inferred that the normal condition of the grape vine's roots was to lie as near the surface as possible, and that it was owing to this that wild vines were so vigorous and long-lived. "Philo" says this deduction is fallacious, because the fruit of the wild grape is not equal in quality to that of the "highly cultivated," or, as he styles them, "domestic" varieties. We confess we are unable to see the force of this reasoning, unless "Philo" can prove that, in that culture of the vine, which has brought it to its present state of development, deep planting is the most important item. Every one acknowledges the superior quality of the highly cultivated, or "domestic" grape, but many will question whether deep planting, which we have shown

and which "Philo" admits to be contrary to nature; has caused the improvement on the natural fruit. The only statements presented by "Philo" in support of his theory are first, that Madeira vine growers plant their cuttings deep. We suppose that all other propagators who understand their business do the same, if they have the grape wood to spare; but this is done, not to make their vines more vigorous or long-lived, but to get as many eyes under the ground as possible, so as to secure all the chances they can of getting roots to their cuttings. His second statement is only the opinion of an author, (unknown to him,) that the longevity and vigor of vines in Madeira are due to deep planting, (if, indeed, it be true, as he states, that they plant deep,) rather than to the peculiar adaptability of soil and climate. Whatever weight may be due to this author's opinion, it will hardly, of itself, counterbalance the patent fact that vines in their natural state are long-lived and vigorous, and that their roots seek the surface.

We beg leave to remind "Philo" that it is not the *inherent* quality of any variety of grape that is under discussion, but only the longevity of the vine and the quality, as affected by the health and vigor of the plant.

Mildew and Rot on Grape Vines.

Editor of Planter and Farmer,—As much attention is now being paid to the cultivation of the grape in Virginia, it may be interesting to persons engaged therein for me to make a report of an experiment and its results, on a Franklin grape vine (one, the most liable to mildew which I know of), in the summer of 1867, when the grapes were about half grown.

I was engaged one evening (*after sundown*) in watering some dwarf pear-trees with a solution of copperas ($\frac{1}{4}$ to $\frac{1}{2}$ lb. to a gallon of rain-water), when I thought I would try it on *this* grape vine; I did so, and the next morning vine and fruit looked black and badly; but in twenty-four hours after, all mildew and rot had disappeared, the vine looked fine and healthy, and what fruit remained ripened well.

Should this prove to be, in all cases, a cure for mildew and rot on grape vines, its benefits to the grape-growing community will be immense:

H. C. SLEIGHT.

How to Keep Hares from Barking Trees.

Mr. Editor,—I accidentally fell upon what my gardener termed “a cute scheme” for keeping the hares from barking my young trees the past winter. It is the wrong season to communicate it for the benefit of others, but those who think it worth while may lay it up for future use.

I have, for the last year, been in the habit of trying to keep my young apple-trees trimmed, without ever *trimming them much*. It is a great deal less labor to cut off young sprouts than large limbs. By having surplus limbs, we retard the growth of the tree, inasmuch as they appropriate a part of the growth. The effort to heal large wounds is a heavy tax on the strength of the tree. For these reasons, I adopted the practice, not thinking of hares. But as soon as the hard weather set in, I noticed that the young shoots which were thrown under the trees were speedily skinned bodily. Taking the hint, I continued to throw down shoots liberally, and as the result, I have not had a single tree barked, though the hares are very abundant about the orchard. I suppose the reason is, first, the bark of the limbs is tender and juicy, and so, more palatable; and then, as the limbs lie upon the ground, Mr. Hare does not have to crook his neck in order to get his supper.

S. A. S.

The Borer in Peach Trees.

I have another practical hint which is for present use. This, however, is not original. I once heard of a lady whose husband had planted a peach orchard with a view to making brandy. She feared that he might become a drunkard, and determined to kill his trees. To effect this, she secretly poured scalding water around the roots, and to her great surprise, the trees did not die, but produced an “extra” crop of peaches. The scalding water killed the worms, but was not sufficient to kill the trees. At first, I adopted this practice very cautiously—but now without fear I pursue it. Early each spring, I scrape around the trees with a large knife on the morning of “washing-day.” When the washing is done, I take buckets full of boiling suds into the orchard, and dash the trees just where the trunks join the ground. In this way thousands of little worms are scalded to death. Lastly, I apply unleached ashes to the trees.

After an experience of several years, I can confidently recommend this practice.

S. A. S.

Wine-Making.

[We clip from the *American Journal of Horticulture* the following description of the mode of making wine at the Longworth House, as of interest to many of our readers who are entering upon the culture of the grape with a view to manufacturing wine.]

For the manufacture of wine, a crop of well-ripened grapes is selected and purchased in the vineyard late in October or early in November, and a man sent to superintend the gathering. All decayed or imperfect berries are first removed from the clusters, which are then cut from the stalk, and taken in covered baskets to the wine-house. A lid, or rather a false head, having innumerable holes, is fitted into the mouth of a capacious cask: the clusters are placed upon it, and the grapes worked through into the cask, leaving the stems on the head. Stemming and mashing completed, the *must* may be allowed to stand for some time on the skins of the grapes before pressing, provided a colored wine is desired; otherwise it is immediately pressed out, and run into large fermenting casks situated in the upper or warmer cellars. The writer noticed one of these casks, having a capacity of over four thousand five hundred gallons. The weight of *must* is expected to be at least eighty-five to ninety. The fermentation thus begun lasts ten to thirty days, varied by the heat of the weather; the gas evolved being allowed to escape through water by means of a siphon, thus preventing the access of air. The effervescence having ceased, and a sediment been deposited, the pure wine is racked off in the following March, and conducted down into numerous casks provided for the storage of still wines in the deep cellars, whose temperature ranges from 40° to 50° Fahrenheit the year round. These casks have generally a capacity of three hundred to five hundred gallons; but a number hold fifteen hundred to two thousand gallons each.

To produce sparkling wines, the still or dry wine thus kept in store is forced up again about the month of June, and run into fresh casks; and to each of these casks there is now added a measure of wine having pure rock candy in solution sufficient to induce a second fermentation. It is now drawn out into bottles; and these are securely corked, and are stacked in the upper cellars till about the month of September, or until the fermentation begins to burst them. The bottles requiring great strength, they are imported from Folembray, a town of Champagne in France: they are as much superior to our best American bottles as the best French plate-glass is superior to common American glass. The French bottle will stand

a pressure of twenty-five to thirty atmospheres; while the American will rarely bear more than sixteen to eighteen, as shown by the manometer used here in testing them. The neck of the French bottle is likewise more uniform. No old nor second-hand bottles are used. The corks are also imported from Epernay.

This second fermentation having now progressed as stated, it is arrested in great measure by lowering the bottles into the vaults built for storage of sparkling wine, where they are stacked by scores of thousands, in long rows resembling cord-wood; each bottle being laid on its side, along which now collects the sediment generated by the fermentation. The development of gas may not, however, wholly cease, as the occasional bursting of bottles will show. In one hot August, some years ago, the gas evolved by a slight excess of the rock-candy caused the destruction of fifty thousand bottles. The wine thus spilled is, however, conducted by a contrivance of stone gutters to a reservoir, and is distilled into brandy; seven measures of wine making one of brandy.

The bottled wine thus stacked in store may remain undisturbed for years. When wanted for market, the bottles, without disturbance of their sediment, are carefully placed in racks, their necks inclining downwards, and are gradually raised day by day, towards a perpendicular and inverted position, each bottle being every day twirled about one-third round and back again by hand several times; which agitation causes the sediment to collect gradually in the neck, leaving the wine above perfectly clear. This operation requires two to three weeks.

The bottles are now carefully elevated from the cellar; and, as a very skilful workman removes each cork, the puff of gas expels all sediment,—a process known as “disgorging,”—and the bottle passes to the hand of another, who quickly adjusts its mouth to a tube, through which it receives by guage a small quantity of the wine-solution of pure rock-candy,—just enough to make good the loss in disgorging; and the bottle is received by a third workman, and furnished, at a single blow of a mallet, with a new cork, which a fourth workman as quickly secures in its place by the use of an admirable machine. The wine is made.

The bottles are now removed to the packing-room, and there properly labelled, and packed in boxes of twelve quart bottles or twenty-four pint bottles each; and every box is secured against fraudulent opening by means of Bartlett's patent,—a red tape tied round the centre of the box, fitting in a groove, and sealed with the seal of the wine-house; which patent has been adopted as the “trade-

mark" for pure wines by the American Wine-Growers' Association of Ohio.

In the preparation of still wines, the proprietor avails himself of a valuable precaution which is of practical interest to the makers of wine.

The discovery made by L. Pasteur (to which was awarded a gold medal by the Emperor of France at the Paris Exposition), that wine heated to the temperature of sixty degrees centigrade will not turn, become diseased, nor deposit sediment, was immediately put into practice at this wine-house.

The Major constructed a heating chamber with capacity for two thousand bottles of wine; and the result exceeded anticipation. Wine heated in accordance with Pasteur's method, and afterwards exposed to the sun for four weeks, only gained a more perfect clearness; while wine so exposed, without such preparation, showed that trace of sediment which the most careful wine-makers have not hitherto been able to prevent. Dry wine in casks can be heated in the same manner. The history of this discovery in France thus far gives assurance that it will be of incalculable use in the preservation and even the restoration of wine.

Of still wines, there are seven kinds made at this house; namely, Catawba, Isabella, Concord, Virginia Seedling, Ives' Seedling, Rentz Seedling, and Taylor's Bullitt. Of sparkling wines, only Catawba and Isabella have hitherto been manufactured; but the list is increased the present season by adding the Delaware, Ives' Seedling, Virginia Seedling, Concord, and Rentz Seedling. They promise great excellence, and are now, for the first time, presented to the American public as sparkling wines.

At a meeting of the Wine-Growers' Association of Ohio, lately held, the President stated that the business of wine-growing is progressing in this country. He thought no better wines were ever made than those presented here to-day. A few years ago, we had but a single wine-grape (the Catawba); but that has become diseased, and it is supplanted by several other varieties. He complimented the wine-growers of Missouri for their foresight in planting new varieties. The Concord produces a thousand gallons per acre. They have tested a new variety (the Cunningham), that produces the best wine in the world. The Chair produced the fact, that Ohio wines were quoted in Berlin; showing that the tables are turned, and America is sending wines to Europe.

He thought that the wine-growers were doing a better work for temperance than the advocates of cold water. Men will have some stimulant; and what better than the light native wines of this country? With plenty of such wine, the people will not drink strong liquors nor sour beer; and hence we are the pioneers of a truly temperance age. From the time the shepherds of Judea, while tending their flocks, watched for the infant Saviour, wine was the beverage of the people. Even the Saviour himself, on a festive occasion there being no wine at hand, changed water into wine. Hence he could not think that those employed in the growing of the grape for wine merited the contumely of the community. We shall induce the Americans to drink the generous wines of our vineyards instead of whiskey. We must raise wine at a low price, so that the common people can have it.

He thought that next season there would be eight millions of Ives' Seedling grapes growing, and soon there would be plenty for all. He looked at the future as glorious for wine-producers. He thought the Catawba should not be given up. A sample to-day was undoubtedly better than any wine that can be imported from Europe.

Mr. Husmann took the ground, that, when must contains all the qualities of a first-class wine, it would be very foolish to manipulate it; but if the must would be improved by the addition of sugar, which is one of the elements of the grape, the addition might very properly be made. So also, should the must contain too much acid, he would tone it down with water. He would add nothing except sugar and water, which are the elements that pure wine contains.

He challenged the world to show that such wines are prejudicial to health.

Dr. Heighway spoke about receiving wines from France that were declared to be pure, but every one of which contained precipitate of lead. He protested against adding anything to wine that is not one of its natural elements. When wine is too sour, it is almost impossible to correct it, and it had better go into vinegar. He hoped that American growers will never resort to logwood or sugar-of-lead in making wine.

The President contended that Nature had put all the sugar into the grapes grown in this country that is required for good wine; and he protested against the addition of any sugar under any circumstances.

Dr. Warder was appointed (with Mr. Martin as alternate) to represent the Association at the Lake-Shore Wine-Growers' meeting at Cleveland, on the 19th of February.—*Journal of Horticulture.*

Rawle's Janet Apple.

BY J. H. CREIGHTON, IRONTON, OHIO.

This old apple is still plenty in market in southern Ohio; but like certain men, needs to be understood to be appreciated. The tree is a slow or medium grower, but healthy and strong, and bears young—but over-bears. It must have good soil, and such is the slow and elaborate process by which it ripens its exquisite fruit that it must positively be left on the tree till winter. It will improve till freezing weather. It is injured less by freezing than any other apple. When pulled too soon, they have a woody taste, and many barrels are taken to market in this state. They will keep till June and lose no flavor; perhaps not one-fourth of those sold in market have been fairly treated. When this apple is in its perfection—having good soil, and allowed to hang long on the tree—we pronounce it the most delicious apple we ever knew. It has a breaking, snapping, cracking texture, and when it splashes and scatters its sparkling delicate juice round over the organs of taste, it seems in an instant to fill every part of the mouth with its high wine-like flavor.—*Gardener Monthly*.

[In Tide-water Virginia it will not keep later than March, but in the Valley keeps well until May—an excellent apple.—ED. SO. PLANTER AND FARMER.]

Currants in the New York Market.

The prices realized by the sale of currants this year have surprised even the dealers. The first arrivals were about July 1st, but being quite green, did not sell very well, yet they brought eight cents per pound. In a few days ripe ones sold for ten cents, but as the quantity increased prices fell to eight cents, and at that price they sold rapidly.

Cherry currants have sold from 15 to 20 cents per pound, as per quality and style of packages. The demand for this fruit is increasing every year.—*Rural New Yorker*.

THE YELLOW ABERDEEN TURNIP has been found one of the most profitable varieties for field cultivation, being more solid and substantial, and containing more nutriment than most of the flat turnip family. W. A. Underhill, of Croton Point, N. Y., who has had much experience and success with root crops generally, has raised his own seed of the Aberdeen for the past fifteen years, continually selecting the best and most compact specimens for this purpose. He informs us that during this period he has improved the variety so much, that they weigh five pounds more to the bushel than at the commencement of his experiments.—*Country Gent'n*.

Household Department.

On Milch Cows.

Mr. Editor,—This is a subject of great interest to every farmer, for the comfort and good living of his family are in a great degree, I might say *mainly*, dependent on this source. What articles of diet are more essential to good living than milk and butter? They form the basis of all those airy as well as substantial superstructures that our ladies rear to tempt as well as satisfy our appetites. The great fault with our farmers, particularly in the southern part of the State, has been in keeping too much stock. They generally keep entirely too many cows, some ten or a dozen yielding half the quantity of milk that three or four first-class cows would give. In winter our cows are badly fed and poorly sheltered; those that survive through March are “turned out to bud,” which means driven into the woods to find subsistence from the young shoots of shrubs and trees, and in summer they have but scant pasturage. Is it at all surprising that under such treatment the breed should degenerate, become small, ill-shapen, and yield, on an average, not more than a pint of milk per day! I had a neighbor who purchased at one of our State Fairs two Devon heifers, beautiful animals; these, with their first calves, gave ten gallons of milk per day, but from hard usage and inattention to the crossing of breeds, my neighbor’s improved cattle have deteriorated so much as to be scarcely more valuable than the common ridge stock.

While care, attention and good pasturage are most essential, yet I am sure we do not give sufficient attention to the selection of our milch cows. In turning out calves, we are not particular in selecting them with a view to this purpose. My views on this point have been strengthened and confirmed by reading a treatise on the subject of milch cows, published by the Agricultural Society of Bordeaux, France. This treatise gives an account of a system entirely new at that time, namely, of ascertaining by external signs or marks on a cow the quantity of milk and time of yield. A committee appointed by the Society to examine and thoroughly test this system, pronounced it infallible, and awarded the discoverer, M. Francis Guéron, a gold medal. Other Societies took hold of the subject, with the same result, and Guéron received various medals and complimentary letters testifying to the utility of his discovery.

These external signs or marks are certain spots on the hinder part of the cow formed by the meeting of the hair as it grows in opposite directions, and on these spots is always found a kind of bran or dandruff. These marks Guénon calls ears or quirls, and once pointed out, can be easily discerned by any one. After twenty-five years of close observation, he reduced his knowledge to a regular system, dividing milch cows into eight classes, according to the size and shape of these spots or marks (he calls them *escutcheons*), and he could, by looking at these marks tell how much milk a cow would give, from twenty-six quarts to half a pint; the quality of the milk, whether creamy or serous; and also what length of time, after being with calf, she would continue to give milk. By this method, we are enabled not only to judge of the qualities of the full-grown animal, but with equal certainty pass judgment on three year old calves.

These facts must be of incalculable advantage to the dairyman, and greatly assist our farmers in determining which calves to turn out for milch cows. All such as belong to Guénon's eighth class (and we have many such) should be condemned to the slaughter-pen, lest by crossing we injure others of a higher class.

Thinking, perhaps, there may be some of your readers interested in this subject, and who would like to know these signs or marks, I will describe them as plainly and succinctly as possible. In selecting a milch cow according to Guénon's directions, we will take one of the first class. The udder should be covered with fine downy hair growing *upwards*, from between the four teats, extending upward over the hinder part of the udder and the region above it, blending with a similar growth of hair pointing *upwards* also, which begins on the legs just above the hock-joint, covering the inner surface of the thighs. This growth of hair pointing upwards encroaches a little on the outer surface until half way up the hind quarter, and gradually contracting upwards to the terminus of the back-bone. There should be also two small oval spots or marks two inches wide by three inches long, above the hind teats, formed by hair growing *downward*. These two marks can be easily distinguished by the hair being paler than the surrounding hair, which grows *upwards*.

All classes of persons, by means of these guides, are enabled to form judgments of cows, and no matter to what breed a cow may belong, if she possess these marks, she is infallibly a good milch cow.

Under the new regime, it will certainly be our best policy to keep a few good cows, and give them the best attention. Immediately in

my vicinity, there has been great difficulty in hiring milkers. The negro women object to any regular out-door work, particularly where early rising is a requisite. Where there are six or eight cows to milk, they soon grow tired, neglect them, and dry up the milk. With such management, there is a great scarcity of milk and butter, and some of our largest farmers have either to do without during the winter months, or else buy Northern butter.

Would it not be better to keep, say four cows, selected according to Guénon's method, build good substantial cow-houses, and give them such attention as the Pennsylvania Dutch farmers do? Turnips furnish a most excellent article of food for milch cows, cut in slices and fed in troughs twice a day. They not only increase the quantity of milk, but keep the animals in good order. They should be regularly and freely salted. In some countries straw steeped in brine is fed to cattle. As far back as Pliny's time, the beneficial effects of salt for stock was known and acted upon; he tells us that "cows have an avidity for salt pasture, and fed on these, give more milk and of better quality for curding into cheese."

Our farming operations will necessarily be more circumscribed in future, but I doubt not so soon as we thoroughly understand and accommodate ourselves to the new system of management, we shall be more comfortable, and enjoy the "labor of our hands" more fully than ever before.

J.

Creek Farm.

PLAIN CAKE.—Two cups of sugar, one of butter, one of milk, half teaspoonful of saleratus, two eggs, four cups of flour.

MOUNTAIN CAKE.—Two coffee-cups of white sugar, one tea-cup of butter, one of milk, four of flour before sifting, two teaspoons of cream-tartar, one of soda, six eggs, grated rind and juice of one lemon put in the last thing.

CORN BREAD.—One quart of milk, four eggs, two tablespoons of sugar, one teaspoon of soda, mix with meal as thick as sponge cake.

CREAM TARTAR CAKE.—One cup of sugar, two of flour, one of sweet milk, one egg, one tablespoonful of butter, two teaspoons of cream tartar, one of soda.

TRAVELLING BISCUIT.—Two pounds of flour, one quarter pound of butter, one teaspoon of saleratus, milk sufficient to roll out; knead till perfectly light.

THE SOUTHERN PLANTER AND FARMER.

RICHMOND, VIRGINIA, APRIL, 1868.

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Editorial Department.

The Violet in the Snow.

An Emblem of Faith, Hope and Charity.

BY REV. T. S. W. MOTT.

'Twas in the spring-time's early day,
When suns begin to beam
With fitful warmth, I took my way
Along a valley stream;
And as I passed sweet scenes among,
With pensive steps and slow,
I saw, where winter lingered long,
A violet in the snow.

Frail, modest flower! what dost thou there?—

'Twas thus my thoughts arose;
Why to this cold and biting air
Thy tender frame expose?
Why com'st thou thus untimely forth,
Like smile of joy in woe?
Thou little spark of life in death!
Thou violet in the snow!

The tiny flower made no reply,
• But firm up bore her head
Midst wind and cold, whilst in her eye
I marked a smile which said,
Go, ask fair virtue how she's bright,
Where tears in sadness flow;
And then thou'lt learn to read aright
A violet in the snow.

And then I saw the moral hue:
'Tis thus where all is gloom;
Where naught is left in life to cheer
Our passage to the tomb;

Where saddest seem their hearth and home,
To mortals here below
The angel-form of Hope will come
Like violets in the snow,

To say a fairer, happier day
In the dim future lies,—
Our March is passing into May,—
Our April's cloudy skies
Will soon receive a warmer sun,
Nor cold winds longer blow,
Nor streams be seen with ice to run,
Nor violets in the snow.

The moral yet is clearer now:
'Tis thus where sorrows fall,—
Where gath'ring anguish knits the brow,
And life's worst ills appall;
Where even Hope itself has fled,
Sweet Charity will go
To soothe the heart and rear the head,
And dry the tears that flow.

The moral yet is clearer still:
'Tis thus where darkness lowers
Round the tried soul, and doubting ill
Benumbs her nobler powers,
That new-born Faith will point above,
And peace serene bestow,
Speaking of coming life and love,
Though all around be snow.

Eternal Source of all that's bright,
And pure, and fair, and brings
Thy nobler, holier, truths to light,
By means of humble things!
O teach my heart to feel thy love,
Attune my soul to know
Thy hand alike in stars above,
And violets in the snow.

And as I pass life's vale along,
O lend me still thy light;
Still give me grace to flee the wrong,
And aye pursue the right;
To read a lesson in each flower,
Each scene where'er I go;
In every leaf that decks the bower,
And violets in the snow.

Long years have passed since then away,
And joy and grief been mine;

I've seen life's fairest flowers decay,
Youth's bright warm sun decline;
I've wandered on with weary foot,
Through toil and pain and woe;
I've loved and lost, but ne'er forgot
That violet in the snow.

The Virginia State Agricultural Society.

It gives us pleasure to state that the sub committee of this Society, to whom were entrusted the negotiation for the purchase of the Hermitage Fair Grounds, formerly in the occupancy of the Virginia Central Agricultural Society, have conducted it to a successful issue. They have invested a large portion of their permanent fund in these grounds, and it requires yet a considerable outlay to put the buildings and fencing in repair.

This action on the part of the State Society has given to the people of Richmond and the State at large, most convincing proof of its vitality, as well as its determination to maintain the position of being ready at all times to meet the wishes of the people in the holding of annual Fairs at *Richmond*, beginning at as early a period as shall be deemed wise and expedient; having due regard to the resources of the Society and to the wants of the agricultural and industrial community.

Errors Corrected.

In Gen. Richardson's article, in our February number, on his mode of cultivating asparagus, a typographical error occurs in the fourth line of page 104 by the *malapropos* insertion of a full stop in the middle of the sentence calculated to mislead the reader. It should read, "I split the ridges with a single-horse plough the next season, running twice in each bed," &c.

In the December number of the *Planter* we acknowledged the receipt of some fine specimens of a new seedling called the "Stonewall" apple, grown by Dr. R. J. H. Hatchett, of Lunenburg county, Va. In making the acknowledgment at that time, we erroneously gave the Dr.'s name as B. J. H. Hatchett—and take this opportunity to make the correction, and at the same time to thank him for cuttings of the same apple recently received.

Fertilizers.

Seeding and planting time is almost here, and the question now arises in every thoughtful farmer's mind, what Fertilizers shall I buy?

Fertilizers our people *must have*, and they should only buy those known or believed to be reliable and best suited to the character of the soil and the nature of the crop or crops to be grown. For instance, Peruvian Guano, a Fertilizer known to be of value in the growth of fine Yellow Tobacco, is not considered by many, so efficient in making the pounds in Shipping Tobacco. And a *strongly phosphated preparation* that will grow heavy Shipping Tobacco weigh-

ing from four to five plants to the pound (on even moderately thin land, having a clay sub-soil), is not so well adapted to the growth of Yellow Tobacco.

It is very important, then, that farmers should *know* what suits them, and apply understandingly those Fertilizers that shall not only be helps to their crops, but improvers of the soil.

Our Advertising Sheet contains a most respectable list of Fertilizers, many of the vendors being personally known to us.

In Richmond, we have "the Southern Fertilizer Company," and "the James River Manufacturing Company," whose preparations have been *tested* for several seasons. As dealers, and representatives of manufacturers, we have R. F. Williams & Co.; Nolting & Kohler, agents for Rhodes' Super Phosphate; Messrs. Allison & Addison, agents for Jno. S. Reese & Co.'s Pacific; and the Lodi Manufacturing Company of New York; Spotts & Gibson, agents for Wilson's Super Phosphate; and Wise Brothers, agents for Baugh's Super Phosphate. G. Ober, Esq., of Baltimore, offers through his well-known agents, Messrs. Deane & Somerville, his valuable Mixtures. Lister Brothers, of New York, and Harrison, of Philadelphia, offer preparations claimed to be rich in *food for plants*.

The Rodunda Island Guano, offered by Messrs. C. T. Wortham & Co., at \$30 per ton, is pronounced a natural Guano, the deposit of fish-eating birds. It is certainly worthy of a fair trial, for our people need, in their impoverished condition, Fertilizers at low prices, and we would gladly see *this* tested.

An American Manufacturer Abroad.

"HONORS OF THE FRENCH EMPEROR TO WALTER A. WOOD.

The official confirmation of a brief announcement made some time since of the conferring of the order of the Legion of Honor upon Mr. Walter A. Wood, of Hoosick Falls, in this county, by the Emperor Napoleon III, has been received in this country within a few days, from the Minister of Foreign Affairs at Paris. The following is an exact translation of the original document:

'BUREAU OF FOREIGN AFFAIRS, Paris, Jan. 4, 1868.

SIR,—I have the honor of informing you that the Emperor, wishing to give you a testimony of particular esteem, does, at my suggestion, confer upon you the cross of Chevalier of "His Imperial Order of the Legion of Honor." You will receive the decoration from the hands of His Majesty. I congratulate myself upon having named you for this mark of distinction, and upon having occasion to offer you, sir, the assurances of any distinguished consideration.

Minister of Foreign Affairs,

MOUSTIER.

Mr. Wood, Hoosick Falls, State of New York, Constructor of Agricultural Machines."

The foregoing was handed to us by P. H. Starke, Esq., of our city, who is the agent for the sale of the celebrated Mower and Reaper that bears Mr. Wood's name,

We give it publicity, because we desire to show what rapid strides *our people* are making in mechanics, and how inventors of the old world are giving place to those of the new, when brought into close competition. As an evidence of this, the conferring of "the order of the Legion of Honor" upon Mr. Wood by the Emperor of the French is valuable.

"The Virginia Horticultural and Pomological Society."

With returning spring, the officers and members of this *invaluable* Society are astir, and seem preparing for a through season's work. Below we give the proceedings of a meeting of their Executive Committee, held on the 13th ult., and which, we regret, were handed us too late to come into our Horticultural Department. A regular monthly meeting will now be held, and the discussion of horticulture, in all its branches, promises to be a most interesting feature in connection therewith. We call on the votaries of Flora and Pomona throughout the State to give the "Horticultural and Pomological Society" their cordial support:

A called meeting of the Executive Committee of the Virginia Horticultural and Pomological Society was held at the office of the *Southern Planter and Farmer* Wednesday evening, March 18th, 1868. Present: President W. Gilham, (in the Chair,) Messrs. Werth, Haxall, Davis, Claiborne, Johnson, Dimmock, Tower and Shields.

Dr. Johnson moved that a committee be appointed to select suitable persons to canvass the city with a view to securing members and extending the interests of the Society.

Mr. Tower moved, as a substitute for the motion of Dr. Johnson, that a Finance Committee be appointed, to take into consideration the entire subject of ways and means, receive a quarterly report from the Treasurer, and select suitable persons for canvassing the city, which was adopted.

Resolved, That monthly meetings, for discussions, be held, the first to be the first Monday in April next, and the question for discussion to be "The General Culture and Treatment of Apples."

Mr. Davis was selected to discuss the subject.

The President, Colonel Gilham, appointed, as the Committee on Finance, &c., Major Claiborne, Mr. William H. Haxall and Captain C. H. Dimmock.

On motion of Dr. Johnston, a committee was appointed to make a collection of books and papers for the benefit of the Society, and to inquire and report, at the next meeting, upon the possibility of securing a room for the meetings of the committee.

The President appointed Mr. Werth, Dr. Johnson, and Mr. Tower to be the committee last named.

On motion, the meeting adjourned to meet the first Monday in April next.

CHAS. H. DIMMOCK, Secretary *pro tem*.

COLONEL WILLIAM GILHAM, President.

Our Correspondence.

We are glad that our friends throughout the country are at last availing themselves of our pages as a medium of intercommunication, and that "our correspondence" bids fair to be a decidedly interesting feature in "*The Southern Planter and Farmer*." This is what we have long desired; our farmers must feel that we are *their special organ*, and that our chief aim is to subserve the best interests of the cause we advocate, and that it is ever our pleasure to receive and give to the public, through our pages, well-written communications upon all practical subjects connected with Agriculture, Horticulture, etc. We invite an *enlightened correspondence*, that shall give to our readers actual re-

sults of interesting experiments; facts hitherto known and acted upon only in certain neighborhoods; the condition of growing crops in different sections of the country; the yield resulting from the use of the various fertilizers now offered for sale, &c.; for it is only in this way that we can utilize for the general good, individual experience and practice. The kind and flattering reception which has been given our journal by its friends in this and other States, is but a stimulus to further effort on our part; and if our readers should find in the following correspondence expressions *strongly commendatory* of the *Southern Planter and Farmer*, we trust to their generosity to believe that *we* give them in no vain-glorious spirit, but as the expression of a *most lenient good will* toward us, on the part of our friends, and as giving their appreciation of the great variety of original and useful matter, for which we are indebted to an able corps of correspondents:

Correspondence of Southern Planter and Farmer.

To Chas. B. Williams, Esq., Editor *Southern Planter and Farmer*:

"Permit me to congratulate you and the agricultural community on the great improvement of the *Planter*. I have read the February number with great interest. It reminds me, by the number, variety and value of its original communications, of the *Farmer's Register*. The cultivated intellect of Virginia is evidently again awakening to the importance of our calling. The new circumstances under which we are placed, and the many difficulties of our position arising from the madness and folly of our political rulers, which greatly aggravate our private troubles, call for the wisest counsels and most strenuous exertions of our best and most intelligent men. I am glad to see that your paper is about to bring such men to the rescue.

"I was gratified to see, in a late number of the *Whig*, that there is a prospect of speedy immigration from Europe. The immigration of Hollanders is particularly interesting to Tide-water Virginia. The soil and climate, and the great *water privileges* of this section, will suit them exactly. * * * * *

"We have had a terrible winter for farming with hired labor. The ground has been frozen almost constantly since the middle of December, and is now (5th of March) so hard frozen, that it is impossible to plough, or to dig post holes in the open field. Very little farm work has been done, and we shall again have great difficulty in getting spring crops planted in time. The labor of the freedmen, under the nurture of their kind friends at Washington, is becoming more and more worthless. I have now dispensed with them almost entirely, and employ white laborers, whom I find much preferable in all respects. Indeed, we cannot afford to pay wages for the inefficient labor of the freedman.

"_____."

Westmoreland County, Virginia.

To Chas. B. Williams, Esq., Editor *Southern Planter and Farmer*:

"I feel really proud in receiving your last number, that our dear old Commonwealth can have the advantage of so many really profitable articles each month on the subject of agriculture; and although the war has left us all without money, I think it will be to the advantage of every farmer in the State, who can claim one hundred acres of land, to subscribe to and pay punctually for your paper, and I shall use my influence, as far as I have any, to get

our farmers to subscribe to it, and will pay my own subscription as soon as I can visit your city.

"My main object in now writing to you is, to let your correspondent (whose name you did not give) from Richford, Tioga county, New York, know, that, although he candidly confesses he is a real Connecticut Yankee, if he will pay me a visit, I will not only sell him a first-rate farm of two hundred acres, but will furnish ten others, with similar tracts adjoining; and that, if he will write to me what day he will be at Amelia Court-house Depot, on the Danville railroad, I will meet him with my horse and buggy and take him to my house, and not only show him land I have for sale, but will take pleasure in riding around the county, showing him the desirable tracts that can be bought. I think I will also convince him that, no matter what his politics may have been, if he is a quiet, peaceable farmer and does not insult our people, he will receive a cordial welcome, and can not only buy a great bargain in first-rate land, but convenient to market, convenient to churches, and healthy climate, with as good, if not the best, most law-abiding, friendly and kind people to live amongst, he ever saw. As the only means of communicating with him, I must ask the favor of you to enclose this letter to his address. * * * * *

" —————."

Amelia C. H. P. O., Amelia County, Va., March 14th, 1868.

Dear Sir,—I am extremely gratified with the February and March numbers of your *Planter and Farmer*. I have read them with deep interest and great pleasure. Glad am I to find that you have again assumed a position which you so early, long and honorably occupied, for the purpose of accumulating facts, truths and principles on all the numerous branches of rural economy, and reflecting back their concentrated radiance for the benefit of that immense portion of the people of the United States who, though down-trodden and oppressed, are practically engaged in tilling the earth.

In this country, the occupation of the husbandman has not been sufficiently appreciated; but, with the advancement of intelligence, the return of reason and justice, and the augmentation of wealth, we shall, like the Egyptians and Israelites in olden time, and the British in modern, go out from the thronged and uncongenial cities to find rational employment, real independence and substantial happiness in the healthful and agreeable quietude of a rustic villa. Let the poor avoid cities, with their external magnificence, where they are left as entirely desolate, unregarded and hopeless, as if abandoned to destruction in the interior of a wilderness, and become the happy inmates of a cottage; while the successful in the career of fortune, should emulate the example of Cicero and Pliny, Bacon and Scott, Washington and Madison, by retiring from the great Babylons of the nation and encouraging agriculture, by becoming its patrons, extending instruction by experiment, and exciting a taste for horticulture, by the introduction of useful and ornamental trees, shrubs and herbaceous plants, and the picturesque and beautiful embellishment of their grounds, and thus render themselves the honored benefactors of the present and all future generations.

I wish you could reform agricultural writers in one important particular. They state their experiments in such a loose way that one can seldom try them. We want quantities in bushels, distances in yards, areas in acres, in short, the length, breadth, weight, measure, time, &c., &c., of everything, minutely,

accurately, and in terms understood everywhere. We are very ignorant here of the labor-saving machines at the North. A list and description of all invented within twenty years, and in successful operation, with their prices and where they could be had, would be highly acceptable here. Mr. Editor, I am a young farmer, and comparatively inexperienced; but, if it be acceptable, I will, from time to time, give you my experience and the result of my experiments, with some thoughts on agriculture.

Very respectfully,

GEORGIUS.

Buckingham County, Va., March 20th, 1868.

P. S.—In reply to the latter part of your correspondent's letter from Richmond, Tioga county, New York, February 9th, 1868, I would simply say that we have plenty of "openings" in Buckingham of good land and at low prices for him, or any one else who will act the gentleman and eschew politics—especially Radicalism. He must determine his *status*, and will be treated accordingly.

G.

We give "Georgius" a place in our pages with great pleasure, and hope to hear from him frequently.—[ED. SO. PLANTER AND FARMER.]

PLANTER AND FARMER,—Will some one who has had experience, inform me through the "Planter and Farmer," of all the particulars as to picking and marketing strawberries, thirty miles by railroad? I used, last season, the crates and baskets advertised by the American Basket Company in the "Planter and Farmer." They are very nice for the purpose, yet I failed to put my berries in market in good condition—got only half the price others did, who had them in hand baskets.

I. I. HITE.

Arrington Depot, Nelson County, Va.

MR. EDITOR,—We are suffering in this section of the State from the ravages of a host of invaders, whose increase and voracity within the last few years have carried their depredations to a point beyond endurance. I refer to what is vulgarly, but generally, known as the "lady-bug." Melons, cucumbers, cymblins, pumpkins, &c., have suffered so severely, that their successful cultivation is rendered impracticable. I have seen entire and repeated plantations destroyed successively, as soon as the vines made their appearance above the ground. My object, therefore, in writing is to obtain the knowledge of a means by which they can be destroyed or driven off. A reply from yourself, or some of your correspondents, through your columns, suggesting an *effectual* remedy within reach of the common farmer, is respectfully and earnestly solicited.

WATERMELON.

Prince Edward County, Va.

We hope some person will respond to the inquiry of our correspondent, who has found a remedy that he can confidently recommend from practical experience of its efficacy. In this connection, we would mention a new soap that has been prepared by Peter Crew, Esq., of this city, in which the principal ingredient is Kerosene oil. The well known aversion of all insects to the fumes of Kerosene oil, leads us to think that the suds of this soap will prove a remedy in the case of our correspondent, as well as a valuable wash to trees, vines, &c., and invite our friends, engaged in market-gardening or fruit culture, to give it a trial.—[ED. SO. PLANTER AND FARMER.]

Book Notices.

We hail with pleasure the return of our old friends, Messrs. West & Johnston, and hope that great success may attend their resumption of business. It is a source of gratification to those long identified with our city, to see that so many of her citizens have survived the trials of the past six years, and are, one by one, entering upon their old avocations. We bespeak for them *all* a liberal patronage. Messrs. West & Johnston displayed great energy during the late war in supplying the literary wants of our blockaded people. They have now fitted up a very attractive store in Shafer's new block, and it is only necessary for their old friends to remember their services in the past to secure for them a generous support in the future.

THE BALTIMORE BUSINESS COLLEGE AND TELEGRAPHIC INSTITUTE is one of a chain of Business Colleges extending throughout the United States. Any one of them, we doubt not, can offer to our young men such advantages as will fit them to fill useful and responsible stations in life, but none of them offer better credentials than the *Baltimore Business College*, and we feel assured that under the energetic management of Messrs. Sadler, Drysdale & Burnett this institution will command a liberal share of Southern patronage.

THE LIFE OF JEFFERSON DAVIS. This is the title of a handsomely bound volume from the pen of our fellow-townsmen, Frank H. Alfriend, E.-q., and for which we are indebted to the kindness of the National Publishing Company, No. 917 Main street. This life of one of the most talented sons of the South now living, comes most opportunely, and being written in a fair and candid spirit, brings much to light that the enemies of Mr. Davis would gladly conceal, while it does not attempt to shade the fact that he was ever a staunch supporter of the rights of the South, and of those principles that were "the bone of contention" in the late struggle.

This book is a part of the record of the sad past, and together with the "constitutional view of the late war between the States, etc.," by Hon. Alex. H. Stephens (which is also promised the public, by the National Publishing Company), will give to us and to succeeding generations a true history of the points at issue.

Let every man who can afford it place these books in his library.

THE STANDARD OF EXCELLENCE AS ADOPTED BY THE AMERICAN POULTRY SOCIETY, is the title of a small pamphlet compiled by An Halstead, Esq., New York. We have no doubt that it will prove of value not only to poulterers, but farmers throughout the country, as its descriptions of the appearance and distinguishing marks of the various breeds of fowls now offered for sale are very clear indeed.

THE UNITED STATES MUSICAL REVIEW—A CHOICE LIBRARY OF MUSIC—Published by J. L. Peters, 200 Broadway, New York—merits the attention of all lovers of music. It is a mammoth monthly magazine, sheet music size, containing over seventeen pages of musical news, reviews, and choice art items, every line of which is readable, and we should say, *invaluable to all musicians*. This alone is well worth a year's subscription, which is only \$2. The publishers, however, do not stop here, for, in addition to the above, each number contains *four pieces of choice new music* by the *best writers in America*, thus giving a select library of new music at such a low rate that even the poorest may indulge in what has hitherto been considered a luxury.

The music in the *Review* is of the best, as the following select list will testify, all of which has appeared within its pages during the last six months: "Nora O'Neal," "Katy McFerran," "You've been a friend to me," and "Kiss me good-bye, darling," all by Will. S. Hays; "Good-bye, but come again," and "Do you think the moon could have seen us?" by J. R. Thomas; "Ally Ray," and "Little Brown Church," by William S. Pitts; "Maribell," by Ly. Danks; "Let the dead and the beautiful rest," "Break, break, O Sea," etc.

Also Kinkel's "Heavenly Thoughts" and "Maiden's Blush Schottische," Mack's "Damask Rose" and "White Rose March," and several other choice pieces, amounting in all to \$9 at retail prices.

The *United States Musical Review* is published at \$2 per year; single copies, 20 cents. No musical family should be without it.

AMATEUR CULTIVATOR'S GUIDE TO THE FLOWER AND KITCHEN GARDEN. Washburn & Co., Seed Merchants, Horticultural Hall, 100 Tremont St., Boston, Mass.

A beautiful pamphlet of 144 pages, richly illustrated, containing a descriptive list of two thousand varieties of flower and vegetable seeds; also a list of French Hybrid Gladiolus. "The character of every plant (say the publishers), whether annual, bi-ennial, perennial, for the greenhouse, or whether hardy or half hardy, is stated; and with our prefatory remarks upon the culture of each, there can be no difficulty in their successful growth. In addition to this information, our remarks on laying out flower-gardens will, we hope, not only prove a valuable aid to amateurs, but assist in disseminating a true taste for gardening art."

THE CAMPAIGNS OF LIEUTENANT-GENERAL FORREST, as written by and under his own direction and supervision, will doubtless prove one of the most interesting books yet offered.

We have not seen a copy, but know enough of the deeds enacted, to say that if they are well told, they must make a most readable book.

Address J. P. Miller & Co., Publishers, Philadelphia.

THE RICHMOND MEDICAL JOURNAL is a handsomely gotten up monthly, the numbers for February and March being filled with matter of great interest to the profession. Many of our readers are physicians, and we would call their attention to this, *their* organ, as worthy of a liberal patronage.

Address E. S. Gaillard, M. D., Richmond, Va.

THE NEW ECLECTIC maintains its deservedly high standard, and offers for April a rich table of contents.

It is published at New York and Baltimore at \$4 a year by Lawrence Turnbull and Fridge Murdoch, Editors and Proprietors, 49 Lexington street, Baltimore.

It seems that *Southern Society*, one of our choicest weeklies, is soon to be merged into *The Leader*. We quote the following from their Prospectus, and wish them great success:

"*The Leader* will give the News of the Week in condensed and readable form, Foreign and Domestic Intelligence, News from all parts of the South, and the latest Telegrams to the hour of publication.

It will print Good Stories, Literary Gossip and Intelligence; Sketches, Humor, Poetry, and Pictures of Life and Manners.

It will discuss the Topics of the Day, and the Course of Political Events.

It will note the Progress of Public Improvements, and look after the interests of Commerce, Industry, Labor and the Laboring Man.

It will have Notes on Art, Music, the Drama and Public Amusements.

Single copy, one year, \$3; single copy, six months, \$2.

Address "The Leader," Baltimore, Md."

THE SOUTHERN HOME JOURNAL is a standard weekly, handsomely illustrated, and we find among its contributors many familiar Southern names, and in its columns a great variety of choice literature.

It is published at \$3 per annum in advance, by Messrs. J. Y. Slater & Co., 293 Baltimore street, Baltimore, Md.

THE AMERICAN JOURNAL OF HORTICULTURE AND FLORIST'S COMPANION for March is before us in a most attractive dress. Its publishers are Messrs. Tilton & Co., Boston, Mass.

THE HERALD OF HEALTH AND JOURNAL OF PHYSICAL CULTURE for April is received. Miller, Wood & Co., Publishers, 13 Laight street, New York.

THE RURALIST is the title of a new monthly published by J. S. Sheppard, Esq., Cincinnati, Ohio. We welcome the first number, place it among our exchanges, and wish it a successful career.

THE AMERICAN STOCK JOURNAL. Every Farmer and Stock Breeder should send for a copy of this valuable monthly magazine. The Proprietors offer valuable Premiums of Blooded Stock, rare Seeds, and many other useful articles. Only \$1 a year. Specimen Copies free, with list of splendid Premiums to Agents.

Address N. P. Boyer & Co., Publishers, Gum Tree, Chester county, Pa.

THE MODEL FARMER is a new semi-monthly published by Messrs. Key & Barr, Corinth, Mississippi, at \$2 per annum in advance. The friends of agriculture throughout the South should sustain all such efforts. We extend to *The Model Farmer* a cordial greeting.

THE RURAL MESSENGER, published at Chicago, Illinois, by Jeriah Bonham, Esq., is a neat, plain monthly—cheap at \$1 per annum.

The Leonard Scott Publishing Company are giving to their American readers the best literature of the old world at prices within the reach of even a scanty purse:

"The London Quarterly" (Conservative),

"The Edinburgh Review" (Whig),

"The Westminster Review" (Radical),

"The North British Review" (Free Church), and

"Blackwood's Edinburgh Magazine" (Tory).

All come filled with interesting matter, and one or more of them should be in the hands of every man of a refined and cultivated literary taste.

Commercial Report.

Spring trade has scarcely opened yet, and we therefore report but little activity in any branch of business except Tobacco. Our merchants have stocks of goods in readiness, but customers come in slowly, pay up irregularly, and the stringency of the money market is such as to make the conduct of any business enterprise *hard work*. It is our sincere hope that as spring advances, and crops are brought into market, that much of this pecuniary pressure will be removed. It is certainly the duty of every man to relieve himself from pecuniary obligation at the earliest possible moment that he is able to do so, and by

